# **SERVICE MANUAL**

## RA-1 CHASSIS

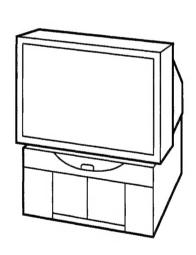
MODEL	COMMANDER DES	T. CHASSIS NO.	MODEL	COMMANDER	DEST. CHASSIS NO.
KP-46V35 KP-53V35	RM-Y137 US RM-Y137 US	SCC-H53M-A			
KP-53V35	RM-Y137 Canadia	n SCC-H58L-A			
KP-61V35	RM-Y137 US	SCC-H53P-A			

Note:

1. Adjustment Manual for this model is separately published.

	Adjustment Manual
Part No.	9-965-106-01







**COLOR REAR VIDEO PROJECTOR** SONY

# **Specifications**

Projection system 3 picture tubes, 3 lenses, horizontal in-line system

Picture tube

7 inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquidcooling system

**Projection lenses** 

High performance, largediameter hybrid lens F1.0

Screen size (measured diagonally)

KP-46V35	46 inches	
KP-53V35	53 inches	
KP-61V35	61 inches	

#### Screen brightness

KP-46V35	1500 cd/m <sup>2</sup>			
KP-53V35	1200 cd/m <sup>2</sup>			
KP-61V35	1000 cd/m <sup>2</sup>			

#### **Television system** Channel coverage

American TV standards VHF: 2-13/UHF: 14-69/

#### **Antenna**

CATV: 1-125 75 ohm external antenna terminal for VHF/UHF

### Inputs/output

VIDEO IN 1 S VIDEO IN (4-pin mini

DIN):

Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75 ohms

VIDEO (phono jack):

1 Vp-p, 75-ohms

unbalanced, sync negative AUDIO (phono jacks):

500 mVrms (100% modulation)

Impedance: 47 kilohms VIDEO INPUT 2 and VIDEO

IN 3

VIDEO (phono jacks): 1 Vp-p, 75-ohms

unbalanced, sync negative

AUDIO (phono jacks): 500 mVrms (100% modulation)

Impedance: 47 kilohms

VIDEO OUT 3

VIDEO (phono jack): 1 Vp-p, 75 ohms unbalanced, sync

negative

AUDIO (phono jack):

500 mVrms

(100% modulation), Impedance: 10 kilohms

MONITOR OUT

VIDEO (phono jack): 1 Vp-p, 75 ohms unbalanced, sync

negative

AUDIO (phono jacks):

500 mVrms

(100% modulation), Impedance: 10 kilohms

AUDIO (VAR/FIX) OUT (phono

iacks): 900 mVrms (100%

modulation)

Impedance: 5 kilohms

Full range speaker:

100 mm (3.9 inches) Subwoofer speaker:

130 mm (5.1 inches)

Front: 15 W × 2

Subwoofer: 40 W × 1

Power requirement

Speaker output

Speaker

120 V, 60 Hz

**Power consumption** 

Max. 330 W

#### Standby mode: 4 W

	Dimensions (W/H/D)	Mass
KP-46V35	1,066 × 1,336 × 698 mm (42 × 52 <sup>5</sup> /8 × 27 <sup>1</sup> /2 inches)	88 kg (193 lbs 10 oz)
KP-53V35	1,218 × 1,442 × 698 mm (48 × 56 <sup>3</sup> / <sub>4</sub> × 27 <sup>1</sup> / <sub>2</sub> inches)	94 kg (207 lbs 1 oz)
KP-61V35	1,338 × 1,619 × 774 mm (52 <sup>3</sup> / <sub>4</sub> × 63 <sup>3</sup> / <sub>4</sub> × 30 <sup>1</sup> / <sub>2</sub> inches)	146 kg (321 lbs 7 oz)

#### Supplied accessories

Remote commander RM-Y137 (1) Size AA (R6) battery (2)

#### **Optional accessories**

U/V mixer EAC-66 Connecting cables RK-74A, VMC-810S/820S, YC-15V/30V, VMC-720M

High-contrast protective screen SCN-46X1 (For KP-46V35) SCN-53X1 (For KP-53V35)

Design and specifications are subject to change without notice.

#### SAFETY CHECK-OUT

#### (US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

- Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
- Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
- Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
- Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
- Check the line cords for cracks and abrasion.
   Recommend the replacement of any such line cord to the customer.
- Check the B+ and HV to see if they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
- Check the metal trim, metallized knobs, screws, and all other exposed metal parts for AC leakage.

Check leakage as described below.

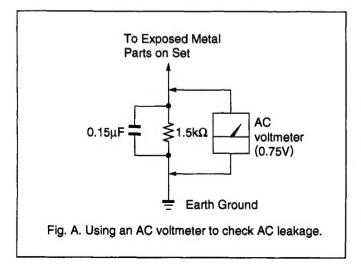
#### LEAKAGE TEST

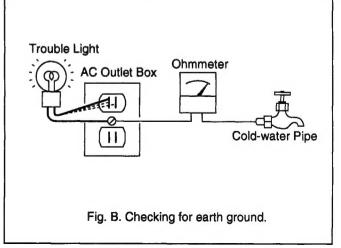
The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufactures' instructions to use these instruments
- 2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

#### HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)





#### TABLE OF CONTENTS

Sec	ction	<u>Title</u>	<u>Page</u>	Sec	tion	<u>Title</u>	<u>Page</u>
1.	GENE	ERAL		4.	DIA	GRAMS	
	Step 1	: Installing the projection TV	5		4-1.	Block Diagrams (1)	26
	Step 2	: Connections	5			Block Diagrams (2)	29
	Step 4	: Setting up the projection TV automatically				Block Diagrams (3)	32
		(AUTO SET UP)	9			Block Diagrams (4)	35
	Setting	g the clock (CURRENT TIME SET)	12		4-2.	Circuit Boards Location	38
	Setting	g the timer to turn the projection			4-3.	Printed Wiring Boards and Schematic Diagram	ms 38
	TV on	and off (ON/OFF TIMER)	12			• A Board	39
	Blocki	ing out a channel (CHANNEL BLOCK)	13			• D Board	45
	Custor	mizing the channel names (CH CAPTION)	13			• U Board	51
	Setting	g video labels (VIDEO LABEL)	14			• M Board	57
	Displa	ying Caption Vision (CAPTION VISION)	14			• P Board	63
	Operat	ting a cable box or DBS receiver	15			• HA Board	70
2	DISA	SSEMBLY				• E Board	71
۷.			10			• G Board	77
		Rear Plate Removal (KP-46V35/53V35)				• ZB Board	82
		Rear Plate Removal (KP-61V35)				• HB Board	82
	2-2.	Chassis Assy Removal				• ZG Board	83
	2-3. 2-4.	Service Position				• ZR Board	84
	2-4. 2-5.	G Board Removal				• K Board	87
	2-5. 2-6.	U Board Removal				MB Board	87
	2-0. 2-7.	M Board Removal				CR Board	93
	2-7. 2-8.	HA Board Removal				CG Board	
		Beznet Removal (KP-46V35/53V35)				CB Board	95
	2-9-1.				4-4.	Semiconductors	99
		. Mirror Cover Removal (KP-46V35/53V35)		5.	EXF	PLODED VIEWS	
		2. Mirror Cover Removal (KP-61V35)		•	5-1.	Cover (KP-46V35/53V35)	101
		High-Voltage Cable Installation and Removal			5-2.	Cover (KP-61V35)	
		Picture Tube Removal			5-2. 5-3.	Chassis	
		K Board Removal			5-4.	Picture Tube	
3.	SAFE	ETY RELATED ADJUSTMENTS	20	6.	ELE	ECTRICAL PARTS LIST	105

#### (CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

#### WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

#### **SAFETY-RELATED COMPONENT WARNING!!**

COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

#### (ATTENTION)

APRES AVOIR DECONNÈCTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

#### ATTENTION!!

AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

## ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE À SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

## **SECTION 1 GENERAL**

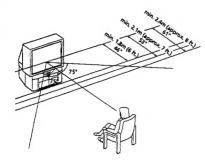
The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

**Getting Started** 

## Step 1: Installing the projection TV

For the best picture quality, install the projection TV within the areas shown below.

#### Optimum viewing area (Horizontal)



Optimum viewing area (Vertical)

Before you use your projection TV, adjust convergence. For the procedure, see "Step 4: Setting up the projection

#### Carrying your projection TV

Be sure to grasp the portions indicated when carrying the projection TV, and to use more than two people.

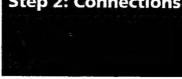
#### (Rear of projection TV)



#### Preparing for your projection TV

TV automatically (AUTO SET UP)" on page 15.

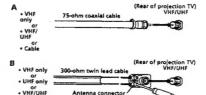
## **Step 2: Connections**

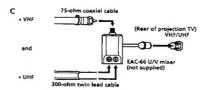


Although you can use either an indoor antenna or outdoor antenna with your projection TV, we recommend connecting to an outdoor antenna or a cable TV system for improved picture quality.

#### To an antenna

Connect your antenna cable to the VHF/UHF antenna terminal. If you cannot connect your antenna cable directly to the terminal, follow one of the instructions below depending on your cable type.





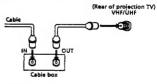
- Most VHF/UHF combination antennas have a signal splitter. Remove the splitter before attaching the appropriate connector.
- . If you use the U/V mixer, snow and noise may appear in the picture when viewing cable TV channels over 37.

#### Connecting an antenna/cable TV system without a VCR

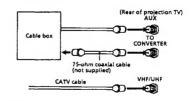
To cable or antenna (Rear of projection TV)

#### To cable box

If your cable company requires you to connect a cable box, make the connection as follows:



#### To cable box and cable

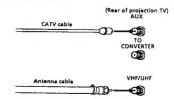


Pay cable TV systems use scrambled or encoded signals requiring the cable box\* in addition to the normal cable connection.

\* The cable box will be supplied by the cable company.

 You cannot watch the signal through AUX connector as a window picture.

#### To cable and antenna



#### Note

 Do not connect anything to the TO CONVERTER connector in this case.



Getting Started

5-EN

#### Connecting an antenna/cable TV system with a VCR

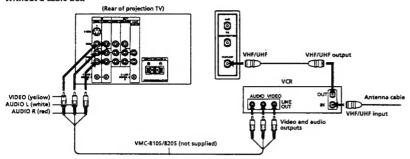
For details on connection, see the instruction manual of your VCR. Before connecting, disconnect the AC power cords of the equipment to be connected.

After making these connections, you will be able to do the following:

- · View the playback of video tapes
- · Record one TV program while viewing another program

#### To a conventional VCR

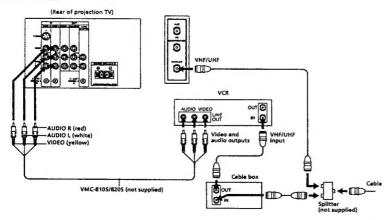
#### Without a cable box



#### Note

- To connect a monaural VCR, connect the audio output of the VCR to AUDIO L (MONO) of VIDEO 1/3 IN on the projection
- . Do not connect the cable to the S VIDEO connector on the projection TV.

#### With a cable box



**Getting Started** 

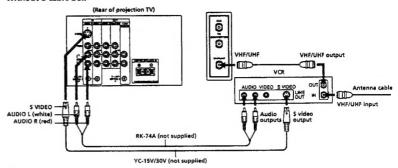
#### 7-EN

#### To an S video equipped VCR

If your VCR has an S video output jack, make the connection as follows.

Whenever you connect the cable to the S VIDEO connector, the projection TV automatically receives S video signals.

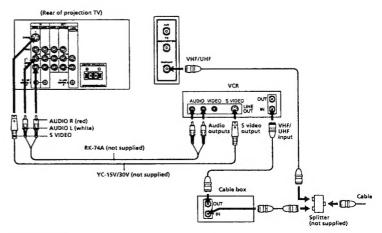
#### Without a cable box



#### Note

 Video signals are composed of Y (luminance) and C (chroma) signals. The S connection sends the two signals separately preventing degradation, and gives better picture quality compared to conventional connection.

#### With a cable box

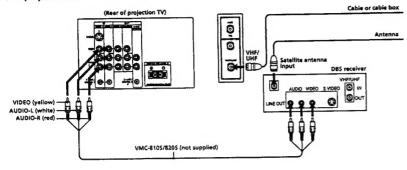


**Getting Started** 

#### Connecting a DBS receiver

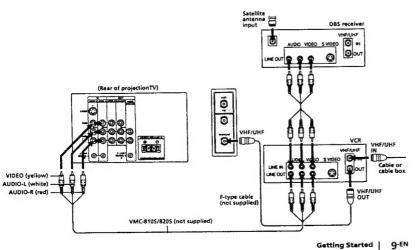
For connection details, see the instruction manual of the DBS (Digital Broadcasting Satellites) receiver.

#### To a projection TV



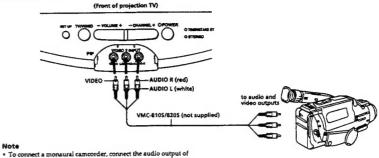
 You can use the S VIDEO jack or the composite video jack for the video connection.

#### To a projection TV and VCR



#### Connecting a camcorder

This connection is convenient for watching the picture from a camcorder.

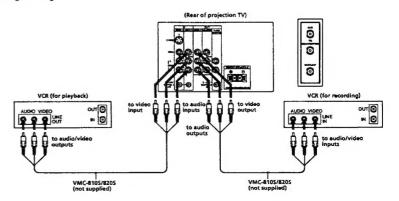


the camcorder to AUDIO L (MONO) of VIDEO 2 INPUT on the projection TV.

#### Connecting two VCRs for tape editing using VIDEO 3 IN and OUT

You can watch input images different from the image being recorded.

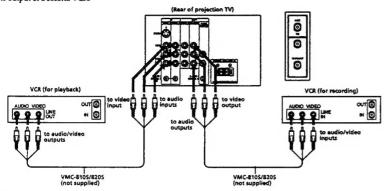
The VIDEO 3 OUT jacks output only the signal from the VIDEO 3 IN jacks. If you make the connection as shown below, you can watch images from either antenna, cable, VIDEO 1 IN or VIDEO 2 INPUT jacks during recording.



10-EN | Getting Started

#### Connecting two VCRs for tape editing using MONITOR OUT

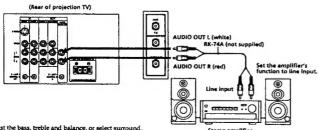
You can record input images displayed on the screen. This type of connection should be used only when you connect from the line input of one VCR, and from the line output of a second VCR.



- · Do not change the input signal while editing through MONITOR OUT, or the output signal will also change.
- When connecting a single VCR to the projection TV, do not connect MONITOR OUT to the VCR's line input, while at the same time connecting from the projection TV's VIDEO IN Jacks to the VCR's line output.
- You can use the S VIDEO conector to connect a VCR for playback and either S VIDEO connector or composite video jack to connect a VCR for recording.

#### Connecting an audio system

When connecting audio equipment, see page 29 for more information.



#### Note . You can adjust the bass, treble and balance, or select surround, an MTS (Multichannel TV Sound) or OSE (Orchestra Seat Effect) mode with the supplied remote commander.

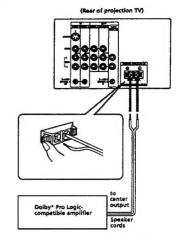
#### Using the projection TV speakers as center speakers

This feature allows you to enjoy the benefits of Dolby Pro Logic by using the speakers of the projection TV as the center speaker. To utilize this system, you must connect an amplifier that is Dolby Pro Logic compatible. Connect the speaker wires from the amplifier's center channel output terminals to the projection TV's CENTER SPEAKER IN. Both right and left terminals must be connected to receive an audio signal. After making the right connections, select "SPEAKER: CENTER" in the AUDIO menu (page 29). The left and right audio channels can be heard through your audio system speakers.

In this connection, adjust the volume with your amplifier.

#### Notes

- · Always match the speaker cord and terminal colors when making the connections.
- · Unplug the projection TV when making the connections. If the exposed speaker cord wires touch while the projection TV is plugged in, the projection TV may short-circuit and be damaged.
- Do not pull on the speaker cords.
- Always turn off the amplifier power before connecting to the CENTER SPEAKER IN terminals.
- When using the projection TV speakers as center speakers, the subwoofer is disabled.



Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,959,590. Canadian numbers 1,004,603 and 1,037,877. "Dolby", "Pro Logic", and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.

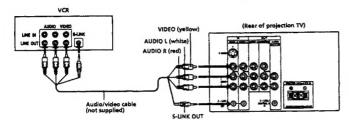
#### Using the S-Link function with S-Link capable Sony VCRs

The S-Link feature allows you to operate the projection TV and VCR with the S-Link function in the following

· When you press the VCR's play button, the projection TV's input mode is automatically changed to video input which is connected, and the VCR starts playing a tape.

· You can turn off the projection TV and VCR together using the SYSTEM OFF button (see page 38 for details).

- The projection TV may malfunction if you connect the S-Link cable to the projection TV without connecting the other end of the cable to the VCR.
- When making the S-Link connection, be sure to insert all the
- The same terminals are used for both S-Link and CONTROL S.

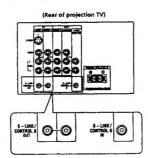


#### Connecting other Sony equipment with CONTROL S jack

This feature allows you to control your projection TV and other Sony equipment with one remote commander.

- . To control other Sony equipment with the projection TV's remote commander, connect the input of the equipment to CONTROL SOUT jack on the projection TV.
- · To control the projection TV with the remote commander of other Sony equipment, connect the output of the equipment to CONTROL S IN jack on the projection TV.

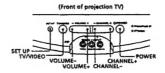
. The same terminals are used for both S-Link and CONTROL S.



## Step 4: Setting up the projection TV automatically (AUTO SET UP)

You can set up your projection TV easily by using AUTO SET UP feature. It presets all the receivable channels, adjusts the convergence and changes the onscreen menu language. To set up the projection TV manually, see "Adjusting convergence" (page 17), "Setting cable TV on or off" (page 18), "Presetting channels" (page 19) and "Changing the menu language" (page 19).

If the TV is set to a video input, you cannot execute AUTO SET UP. Press TV/VIDEO so that a channel number appears.



1 Press POWER to turn the projection TV on.



2 Press SET UP on the front of the projection

The AUTO SET UP screen appears.



AUTO SET UP : ICH+1 AUTO AJUSTES : ICH-I REGLAGE AUTO: NOL+ Press Mittel to Exit

3 Press CHANNEL+ to start AUTO SET UP.

If you prefer Spanish or French to English, you can change the on-screen menu language. Press CHANNEL - for Spanish or VOLUME+ for French.





All of the menus will be set to the factory preset condition in the selected language.

4 Press CHANNEL+ to preset channels.





"AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the following menu appears. If the projection TV receives cable TV channels, CATV is set to ON automatically.



5 Adjust convergence.

(1) Press CHANNEL+.

The CONVERGENCE adjustment screen appears.





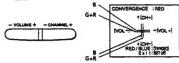
(continued)

(2) Press TV/VIDEO to select RED or BLUE.





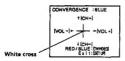
(3) Using CHANNEL +/- or VOLUME +/-, move the line until it converges with the center green



To move horizontal line up/down, press CHANNEL+/-.

To move vertical line right/left, press VOLUME+/-.

(4) Repeat steps (2) and (3) to adjust the other lines until all three lines converge and are seen as a white cross.



#### Notes

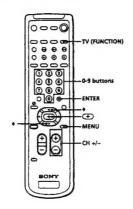
- · If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- . In case of using the AUX connector, press TV (black button) on the remote commander first and make sure that "AUX" is displayed beside the channel number on the screen. Then follow steps 2 to 5 above to perform AUTO SET UP.

#### To preview the main functions (DEMO)

Press VOLUME- in step 3. The functions and menus are displayed one by one. To exit DEMO, press any button.

#### Erasing or adding channels

After AUTO SET UP you can erase unnecessary channels or add the channels you want. Preset channels during the day rather than late at night, when some channels may not be broadcasting.



#### 1 Press TV (FUNCTION).



2 Press MENU.

The main menu appears.





3 Press + or + to move the cursor (>) to SET UP and press .

The SET UP menu appears.





4 Make sure the cursor (▶) is beside CHANNEL ERASE/ADD and press (+).

If the cursor is not beside CHANNEL ERASE/ ADD, press ♦ or ♦ to move the cursor and press

The CHANNEL ERASE/ADD menu appears.





#### 5 Erase and/or add the channel you want: To erase an unwanted channel

- (1) Make sure the cursor (▶) is beside ERASE.
- (2) Press CH + or to select the channel you want to erase.





(3) Press .

The "-" indication appears beside the channel number, showing that the channel is erased from the preset memory.



#### To add a channel that you want

- (1) Press + or + to select ADD.
- (2) Press 0 9 button to select the channel you want to add, and press ENTER.

000 **(9 (9 (9** 0 0 0 0



(3) Press (+).

The "+" indication appears beside the channel number, showing that the channel is added to the preset memory.



- 6 To erase and/or add other channels, repeat
- 7 When you finish, press MENU.



- . If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and
- . If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- Erasing and adding channels are also available for the AUX

#### Adjusting convergence (CONVERGENCE)

The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs. To correct this, adjust convergence.

You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to adjust it manually.

- 1 Press MENU.
- 2 Press + or + to move the cursor (>) to SET UP and press (+).
- 3 Press + or + to move the cursor (>) to CONVERGENCE and press RETURN,

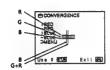
The CONVERGENCE adjustment screen appears.



4 Press + or + to move the cursor (>) to the symbol showing the line you want to adjust, and press .



- 1 RED: Red vertical line (left/right adjustment)
- RED: Red horizontal line (up/down adjustment)
- BLUE: Blue vertical line (left/right adjustment) - BLUE: Blue horizontal line (up/down adjustment)
- 5 Press + or + to move the line until it converges with the center green line, and



To move up/right, press +. To move down/left, press +.

press 🕀 .

- 6 Repeat steps 4 and 5 to adjust the other lines until all three lines converge and are seen as a white cross.
- 7 Press MENU to return to the original screen.

#### Setting cable TV on or off

II you have connected the projection TV to a cable TV system, set CABLE to ON, the factory setting. If not, set CABLE to OFF.

You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press + or + to move the cursor (▶) to SET UP and press .
- 3 Press + or + to move the cursor (►) to CABLE and press .



4 Press + or + to select ON or OFF and press



5 Press MENU to return to the original screen.

. If CABLE appears in black, the projection TV is set to a video input and you cannot select CABLE. Press TV (black) so that a channel number appears.

#### **Presetting channels**

You can preset TV channels easily by AUTO PROGRAM feature.

You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press + or + to move the cursor (>) to SET UP and press .



3 Press + or + to move the cursor (▶) to AUTO PROGRAM and press .



"AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.

4 Press MENU to return to the original screen.

- . If AUTO PROGRAM appears in black in the SET UP menu, the projection TV is set to a video input and you cannot select AUTO PROGRAM. Press TV (black) so that a channel number
- appears.

  If more than 90 seconds elapse after you press a button, the menu disappears automatically.

  Presetting channels is also available for the AUX input.

#### Changing the menu language

If you prefer Spanish or French to English, you can change the menu language.

You do not have to do this procedure if you execute AUTO SET UP (page 15). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press + or + to move the cursor (>) to SET UP and press .
- 3 Press + or + to move the cursor (>) to LANGUAGE and press .



4 Press + or + to select the language and press 🕣 .

The menu in selected language appears.



5 Press MENU to return to the original screen.

. Even when you select Spanish or French language, certain parts of the menus remain in English.



Set the current time before using On/off Timer (page 32) and Channel Block features (page 33). For example, set the clock to 3:15 P.M., Monday.



- 1 Press MENU.







If you need to set DAYLIGHT SAVING, follow the procedure on the previous page.

3 Make sure the cursor (▶) Ii beside CURRENT TIME SET, and press ⊕.

If the cursor is not beside CURRENT TIME SET, press ♦ or ♦ to move the cursor and press ◆.





4 Set the current time.
(1) Press ⊕ to start setting the time.





(2) Press + or + to set the day and press .







(3) Using ♦ or ♦ and ⊕, set hour and minute in the same way as in step (2). When you press ⊕ after setting the minute, the clock starts.







If you make a mistake while setting the time Press RESET while the CURRENT TIME SET menu is displayed, then repeat step 4.

To display the current time Press DISPLAY.

#### Note

 If you unplug the projection TV or a power interruption occurs, the clock will be erased. Reset the current time.

# Setting the timer to turn the projection TV on and off

(ON/OFF TIMER)

You can set the projection TV to turn on and off at the time you specify. Make sure the clock  $\bar{u}$  set correctly. If it is not, set the clock first (page 31).



- 1 Press MENU.
- 2 Press + or + to select TIMER/CH BLOCK and press .
- 3 Press + or + to select ON/OFF TIMER and press (+).







- 4 Enter the ON/OFF TIMER setting.
  - (1) Press + or + to select program 1 or 2 and press

    →.
  - (2) Press ♦ or ♦ to set the days and press ⊕. Each time you press ♦ or ♦, the days cycle as shown below.

EVERY SUN-SAT→EVERY MON-FRI→
SUNDAY→MONDAY→...→SATURDAY→
EVERY SUNDAY→EVERY MONDAY →
...→EVERY SATURDAY



Operations



(3) Press + or ◆ to set the time (hour then minute) that you want to turn on the projection TV and press ⊕.







(4) Press + or + to set the hour duration and press

You can set the hour duration by one hour up to a maximum of six hours.





(5) Press ♦ or ♦ to select the channel and press ⊕.



The TIMER/STAND BY indicator on the projection TV lights.

5 To set the other program, press ① and repeat step 4.

One minute before the projection TV switches to turn off, a message "TV will turn off." is displayed on the screen.

#### To cancel the timer

Press RESET on the remote commander.

#### Note

 If you unplug the projection TV or a power interruption occurs, ON/OFF TIMER settings will be erased. Reset the current time, then set the timer.

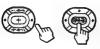
# Blocking out a channel (CHANNEL BLOCK)

This feature allows you to prevent children from watching unsuitable programs.

Make sure the clock is set correctly. If it is not, set the clock first (page 31).



- 1 Press MENU.
- 2 Press + or + to select TIMER/CH BLOCK and press .
- 3 Press + or + to select CHANNEL BLOCK and press ...





- 4 Enter a CHANNEL BLOCK setting.
  - (1) Press ♦ or ♦ to select program 1 or 2 and press

    .

EVERY SUN-SAT→EVERY MON-FRI→
SUNDAY→MONDAY→...→SATURDAY→
EVERY SUNDAY→EVERY MONDAY→
...→EVERY SATURDAY







(3) Press + or \* to set the time (hour then minute) that you want to start blocking the channel and press ⊕.





(4) Press ♦ or ♦ to select the hour duration you want to block and press ↔.

Each time you press ①, the hour duration increases by one hour up to a maximum of 12 hours.



(5) Press ♦ or ♦ to select the channel and press ⊕.





If you select the blocked channel during the time you set, the message "BLOCKED" appears and the picture is blocked and the sound is muted.

To cancel a CHANNEL BLOCK setting Press RESET on the remote commander.

#### Note

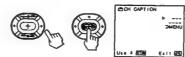
 If the CHANNEL BLOCK and ON/OFF TIMER settings are overlapped, the later time setting has priority over the other setting.

# Customizing the channel names (CH CAPTION)

You can add a caption for up to 20 channels. This feature allows you to easily identify which channel you are watching. You can make your own caption.



- 1 Press MENU.
- 2 Press + or + to select SET UP and press .
- 3 Press + or + to select CH CAPTION and press .



4 Press @ again.







5 Press + or + to select the channel that you want to caption and press ⊕.





- 6 Enter the letters (up to four) to caption the channel:
  - (1) Press ♦ or ♥ to select the first letter.

Each time you press + or +, the letter changes as follows:

0--1---\_.--9---A---8---\_.--Z----&---/---\_(blank space)



(2) Press (1).





(3) Repeat steps (1) and (2) to select the remaining letters and press ( +).





7 Repeat steps 4 to 6 to caption other channels.

To erase a caption Press RESET after step 4.

#### Notes

- If the CH CAPTION menu appears in black, the projection TV iii set to a video input, and you cannot select CH CAPTION.
- Press TV (black button) so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- The channel caption feature is not available for the AUX input.

34-EN |

# Setting video labels (VIDEO LABEL)

This feature allows you to label each input mode so that you can easily identify the connected equipment. For example, you can label VIDEO 1 IN as VHS.



- 1 Press MENU.
- 2 Press + or + to select SET UP and press .
- 3 Press + or + to select VIDEO LABEL and press ⊕.



4 Press + or + to select the input mode you want to label and press .



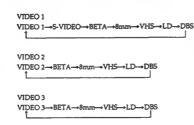




5 Press + or + to select the label and press



Each time you press⊕ or ♥, the label changes as shown below.



6 Repeat steps 4 and 5 to label other input

. If more than 90 seconds elapse after you press a button, the menu disappears automatically.



Some programs are broadcast with Caption Vision. To display Caption Vision, select either CC1, CC2, CC3, CC4. TEXT1. TEXT2. TEXT3 or TEXT4 from the menu. CC1, CC2, CC3 or CC4 shows you a caption, that is a printed version of the dialog or sound effects of a program. (The mode should be set to CC1 for most programs.)

TEXT1, TEXT2, TEXT3 or TEXT4 shows you text, that is information presented using either half or the whole screen. It is not usually related to the program.



- 1 Press MENU.
- 2 Press + or + to select CAPTION VISION and press 🕦.



3 Press + or + to select the caption type and

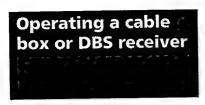
The selected caption type is colored green.



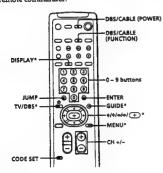


#### To display Caption Vision Press DISPLAY. (See page 21 for details.)

- . Poor reception of TV programs can cause errors in Caption Vision and XDS.
- Captions may appear with a white box or other errors instead of a certain word \* XDS, Caption Vision, and the status display cannot be used at
- the same time. · For details on XDS, see page 21.



You can program the supplied remote commander to operate a cable box or DBS receiver. Follow the procedures below to set the manufacturer's code number in the remote commander.



- The TV/DBS, GUIDE, DISPLAY, +/+/+/→ and MENU buttons can be used only with a DBS receiver.
- 1 Turn off the equipment you want to set up, and press DBS/CABLE (FUNCTION).



2 Press the CODE SET, DBS/CABLE (FUNCTION), and 0 - 9 buttons to enter the manufacturer's code number (see the chart), then press ENTER. For example, to program your remote commander to operate a Sony DBS receiver, press CODE SET, DBS/CABLE (FUNCTION), 8, 0, 1, and ENTER.

3 Press DBS/CABLE (POWER) to turn on the cable box or DBS receiver.

4 Use the cable box/DBS control buttons to check If the code number works.

For example, to operate a cable box or DBS receiver, you can use the DBS/CABLE (POWER), JUMP, CH +/-, 0 - 9 and ENTER buttons.

. If the cable box or DBS receiver does not have a certain function, the corresponding button on this remote commander will not operate.

To operate the projection TV

Press TV (FUNCTION). Then use the projection TV control buttons to control the projection TV.

For more details on operating the cable box or **DBS** receiver

Refer to the operating instructions that come with the equipment.

If the remote commander doesn't work

 First, try repeating the setup procedures using the other codes listed for your equipment.

#### Manufacturer code numbers (cable box)

Manufacturer	Code number				
Hamlin/Regal	222, 223, 224, 225, 226				
Jerroid/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218				
Oak	227, 228, 229				
Panasonic	219, 220, 221				
Pioneer	214, 215				
Scientific Atlanta	209, 210, 211				
Tocom	216, 217				
Zeruth	212, 213				

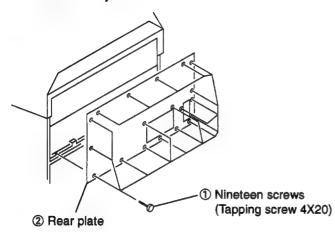
#### Manufacturer code numbers (DBS receiver)

Manufacturer	Code number
Sony	801 (preset code for the supplied remote commander)
RCA	802

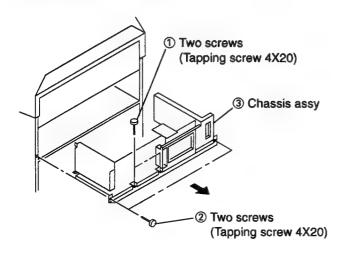
- . If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- . If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this remote commander and you may not be able to operate your equipment with the supplied remote commander. In this case, use the equipment's own remote
- Whenever you remove the batteries to replace them, for example — if too much time is taken, the code numbers may revert to the factory setting and must be reset.

# SECTION 2 DISASSEMBLY

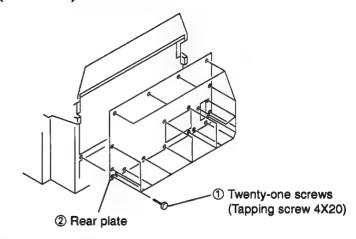
# 2-1-1. REAR PLATE REMOVAL (KP-46V35/53V35)



#### 2-2. CHASSIS ASSY REMOVAL

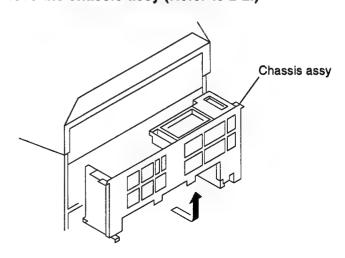


# 2-1-2. REAR PLATE REMOVAL (KP-61V35)

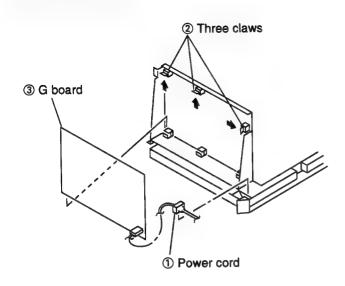


## 2-3. SERVICE POSITION

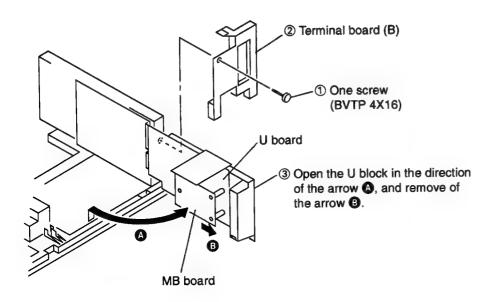
Remove the chassis assy (Refer to 2-2.)



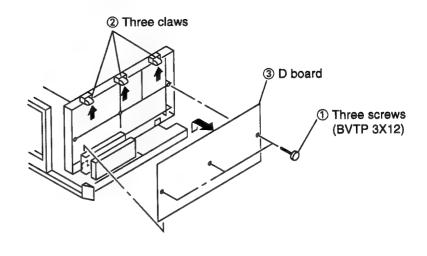
#### 2-4. G BOARD REMOVAL



#### 2-6. U BOARD REMOVAL

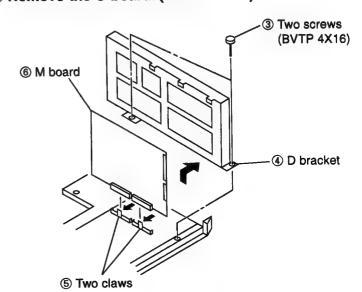


#### 2-5. D BOARD REMOVAL

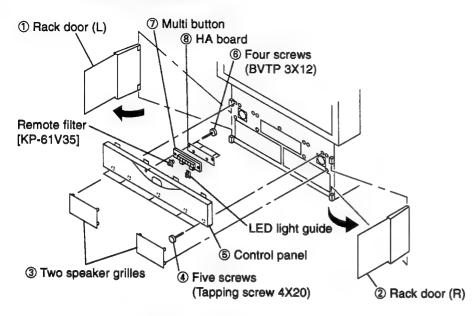


#### 2-7. M BOARD REMOVAL

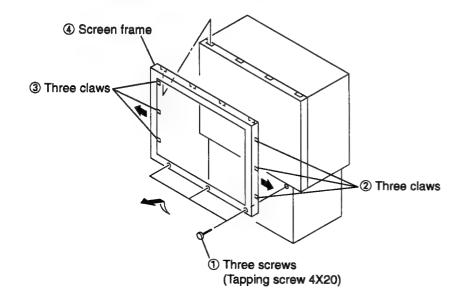
- ① Remove the D board. (Refer to 2-5.)
- ② Remove the U board. (Refer to 2-6.)



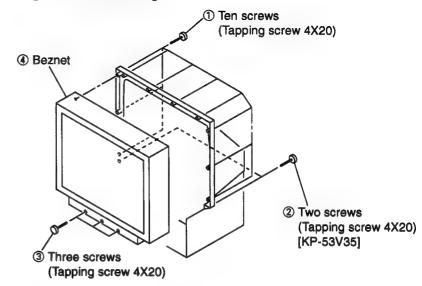
#### 2-8. HA BOARD REMOVAL



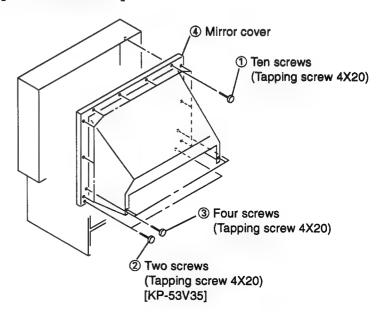
# 2-9-2. SCREEN FRAME REMOVAL [KP-61V35]



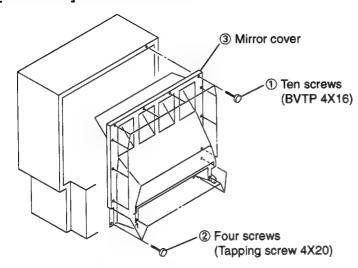
# 2-9-1. BEZNET REMOVAL [KP-46V35/53V35]



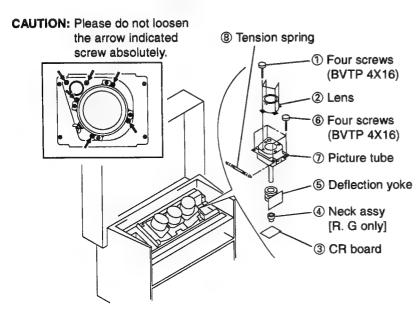
# 2-10-1. MIRROR COVER REMOVAL [KP-46V35/53V35]



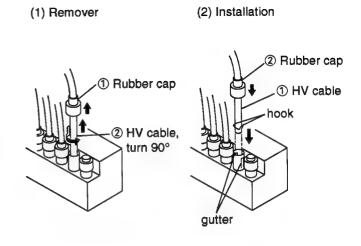
# 2-10-2. MIRROR COVER REMOVAL [KP-61V35]



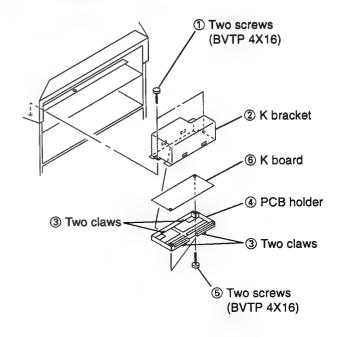
#### 2-12. PICTURE TUBE REMOVAL



#### 2-11. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL



#### 2-13. K BOARD REMOVAL



# SECTION 3 SAFETY RELATED ADJUSTMENTS

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
HV HOLD DOWN CIRCUIT OPERATIONS CHECK AND ADJUSTMENT (*▶ RESISTOR)			* <b>■</b> R809, R988	E BOARD - COMPONENT SIDE -
When replacing the parts marked *✓ on the right, check the HV hold down and adjust.		* marked parts C818, D804, D806, D809, D909, D912, Q915, R809, R855, R856, R857, R858, R954, R955, R983, R984, R988, R991, R995, R996, R998, T803, FBT E board HV Block		CN886 CN885
<ol> <li>Remove the cap for the unconnected pin in the *high-voltage block and connect a *Static Voltmeter.</li> <li>Input 130 VAC power.</li> </ol>	*Static Voltmeter	*HV Block		Remove the cap off from the unused terminal and connect a static voltmeter there.
<ol><li>Receive the *Dot siganl and set the *PICTURE and BRIGHTNESS settings to their minimums.</li></ol>	*Dot pattern		*PICTUREminimum BRIGHTNESS	
<ol> <li>Connect a *33 kΩ variable resistor across the E board *CN885 connector (with the variable resistor set to its maximum).</li> </ol>			minimum	* CN885 O O E board VR33kΩ

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
<ul> <li>5. Gradually lower the value of the variable resistor and check that the hold down circuit operates at a Static Voltmete reading of *33.7 ± 0.8 kVDC and that the rasters disappear.</li> <li>6. If the hold down circuit operates and the rasters disappear at a Static Voltmete meter reading of *34.0 VDC or higher, remove resistor *R809 and mount a *16.0 kΩ 1/4W RN at *R988. If the hold down circuit operates and the rasters disappear at a Static Voltmete reading of *32.0 VDC or lower, remove resistor R809 and mount *6.2 kΩ 1/4W RN at *R988.</li> <li>7. Check Item 5 again.</li> </ul>			*R988 *R988	*33.7 ± 0.8 kVDC  *34.0 VDC or higher *16.0 kΩ 1/4W  *32.0 VDC or lower *6.2 kΩ 1/4W  R988
HV REGULATION CIRCUIT CHECK AND ADJUSTMENT  (*M RESISTOR)  When replacing the parts marked *M on the right, check the HV		* marked parts	*■ R808, R983	E BOARD – COMPONENT SIDE –
regulation and adjust.		C918, C930, C934, C980, D902, D920, D925, Q909, R808, R851, R929, R936, R939, R942, R944, R945, R946, R947, R950, R960, R965, R967, R971, R975, R976, R982, R983, R985, R998 E Board HV Block		CN886 CN885 CN884  O O O O  MR809 MR808
<ol> <li>Remove the cap for the unconnected pin in the *high-voltage block and connect a *Static Voltmete.</li> <li>Input 120 VAC power.</li> </ol>	*Static Voltmete	*HV Block		
3. Receive the *Dot signal and set the *PICTURE and BRIGHTNESS settings to their minimums.	*Dot pattern		*PICTUREminimum BRIGHTNESSminimum	

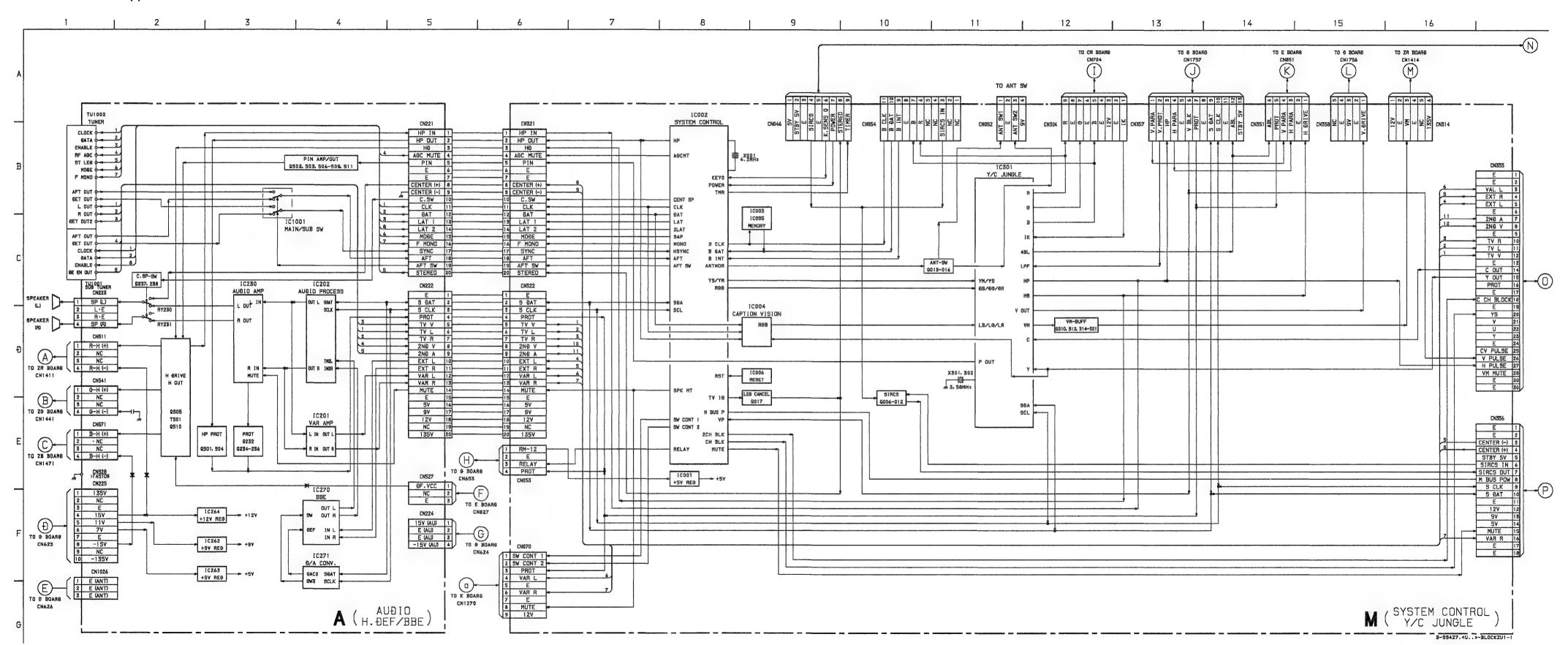
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
<ol> <li>Check that the Static Voltmete reading is *31.0 ± 0.4 kVDC.</li> <li>If the Static Voltmete reading is *30.5 kV or lower, remove resistor *R808 and mount *5.6 kΩ 1/4W RN at *R983.</li> <li>If the Static Voltmete reading is *31.4 KV or higher, remove resistor *R808 and mount *8.2 kΩ 1/4W RN at *R983.</li> <li>If the Static Voltmete reading is *32.0 kV or higher, remove resistor *R808 and mount *10.0 kΩ 1/4W RN at *R983.</li> <li>If any of Items 5, 6 or 7 has been implemented, check Item 4 again.</li> </ol>			*R983 *R983 *R983	*31.0 ± 0.4 kVDC  *30.5 kV or lower *5.6 kΩ 1/4W  *31.4 KV or higher *8.2 kΩ 1/4W  *32.0 kV or higher *10.0 kΩ 1/4W  *32.0 kV or higher
HV HOLD DOWN AND HV REGULATOR SIMPLE ADJUSTMENT  It is normally desirable that the HV hold down and HV regulation checks use a high-voltage meter. However, sometime one is not available, for example in the field, below is a simple adjustment method.  When replacing parts with the mark, replace both the resistors with the mark *R808 (R988) and *R809 (R983) with resistors one rank lower in the E-12 series. Do not replace just one of these resistors! Always replace both with resistors one rank lower.			*R808 (R988) *R809 (R983)	*  E board  CN886 CN885  O O O O O O O O O O O O O O O O O O O

<del></del>					
ILLUSTRATION AND SHAPE AND NUMBER	*  -6-  -6-(5)(4)(3)(4)(4)	*120.0 ± 1.0 VAC, 60 Hz	*143.5 ± 5.5 VDC	*  CN884 (E board)  5 0 0 0 0 1 ABL  ammeter	*120.0 ± 1.0 VAC, 60 Hz
ADJUSTMENT LOCATION		*PICTURE	BRIGHTNESS		*PICTUREminimum BRIGHTNESSminimum
MEASUREMENT POSITION					
EQUIPMENT AND SIGNAL		*Dot pattern	*Digital Multimeter	*Ammeter	*Monoscope pattern
ADJUSTMENT ITEM AND PROCEDURE	OVERVOLTAGE PROTECTION (OVP) OPERATIONS  CHECK  1. Connect a *220 kΩ variable resistance rheostat to the G board C655 (between Pins @ and ⑥ of IC651).	2. Input *120.0 ± 1.0 VAC, 60 Hz power. 3. Receive the *Dot signal and set the *PICTURE and	4. Gradually lower the value of the connected variable resistance and check that when the +B line *voltage is *143.5 ± 5.5 VDC, the overvoltage circuit operates and the rasters disappear.  5. Remove the variable resistor and check the +B line voltage.	1. Connect the *ABL ammeter between *Pins (1) and (4) of the CN884 on the E board.  Have Pins (2) and (3) open.	2. Input *120.0 ± 1.0 VAC, 60 Hz power.  3. Receive a *monoscope signal and set the *PICTURE and BRIGHTNESS settings to their minimums.

- 23 -

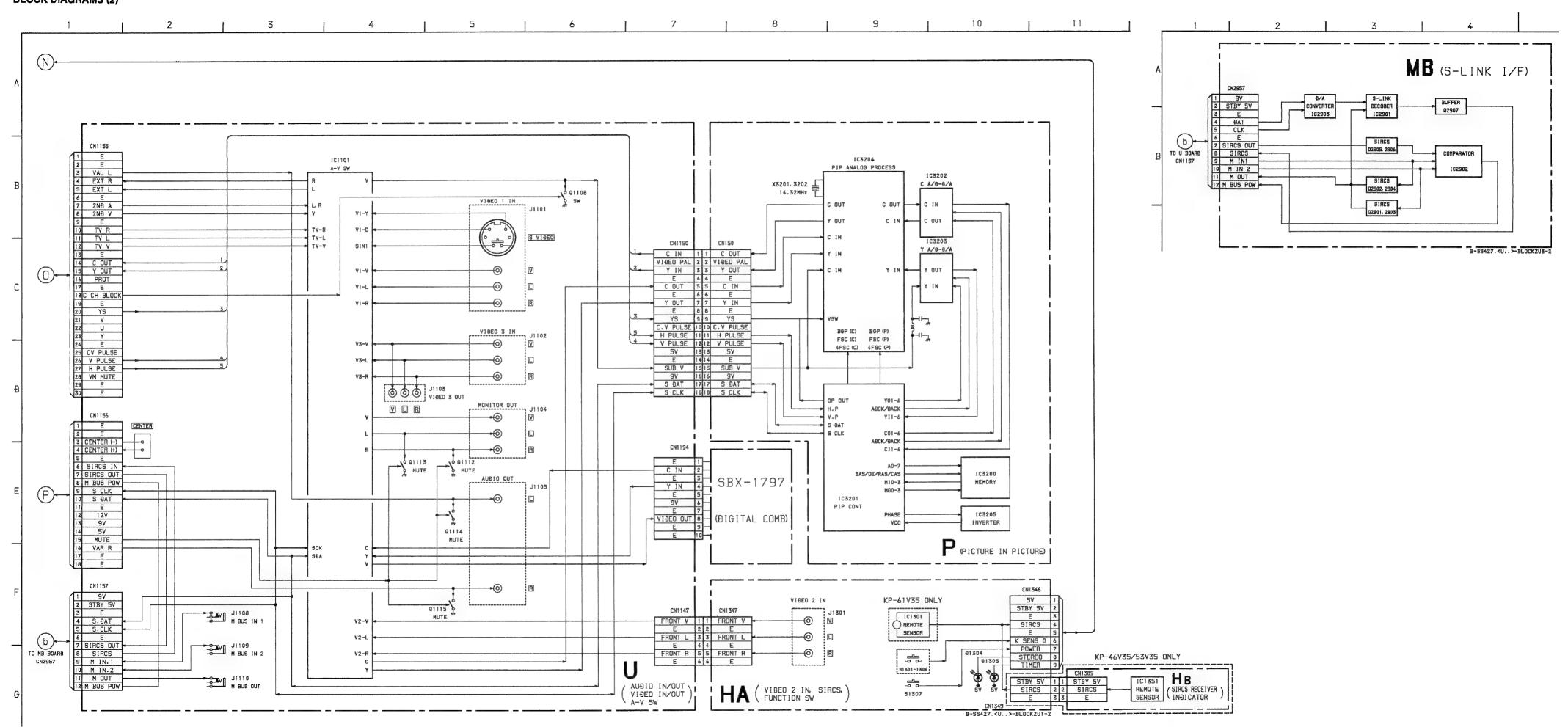
			1	
ILLUSTRATION AND SHAPE AND NUMBER	*Less than 3.35 mA	E BOARD – COMPONENT SIDE –	*120.0 ± 1.0 V, 60 Hz	*135.0 ± 2.0 VDC *130.0 ± 2.0 VDC *Less than 137.0 VDC
ADJUSTMENT LOCATION	*PICTURE BRIGHTNESS		*PICTUREminimum BRIGHTNESS	
MEASUREMENT POSITION				*CN681 pin ①
EQUIPMENT AND SIGNAL			*Dot pattern	
ADJUSTMENT ITEM AND PROCEDURE	4. Gradually raise the *PICTURE and BRIGHTNESS settings and check that below an *ABL current of 3.35 mA (including dark current), the beam current protection circuit operates and the rasters disappear.	<b>+B, +B MAX CHECK</b> When replacing the G board IC651, check the following.	1. Input *120.0 ± 1.0 V, 60 Hz power.  2. Receive the *Dot signal and set the *PICTURE and BRIGHTNESS settings to their minimums.	<ol> <li>Check that the *+B line voltage is now *135.0 ± 2.0 VDC.</li> <li>Set the power supply to *130.0 *2.0 VAC.</li> <li>Check that the *+B line voltage is *137.0 VDC max.</li> <li>If either 3 or 5 is not satisfied, replace IC651 again.</li> </ol>

#### 4-1. BLOCK DIAGRAMS (1)



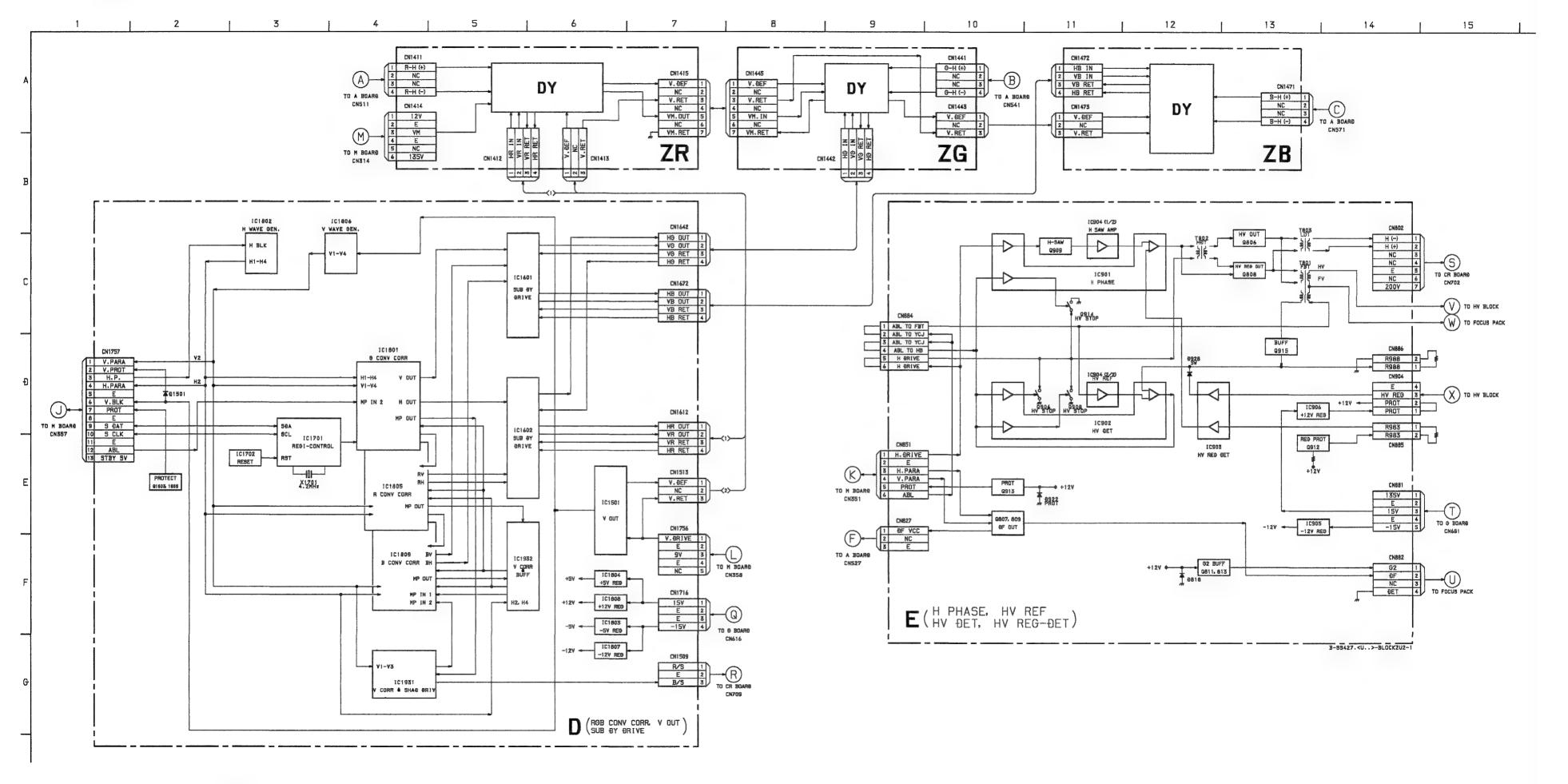
- 28 -

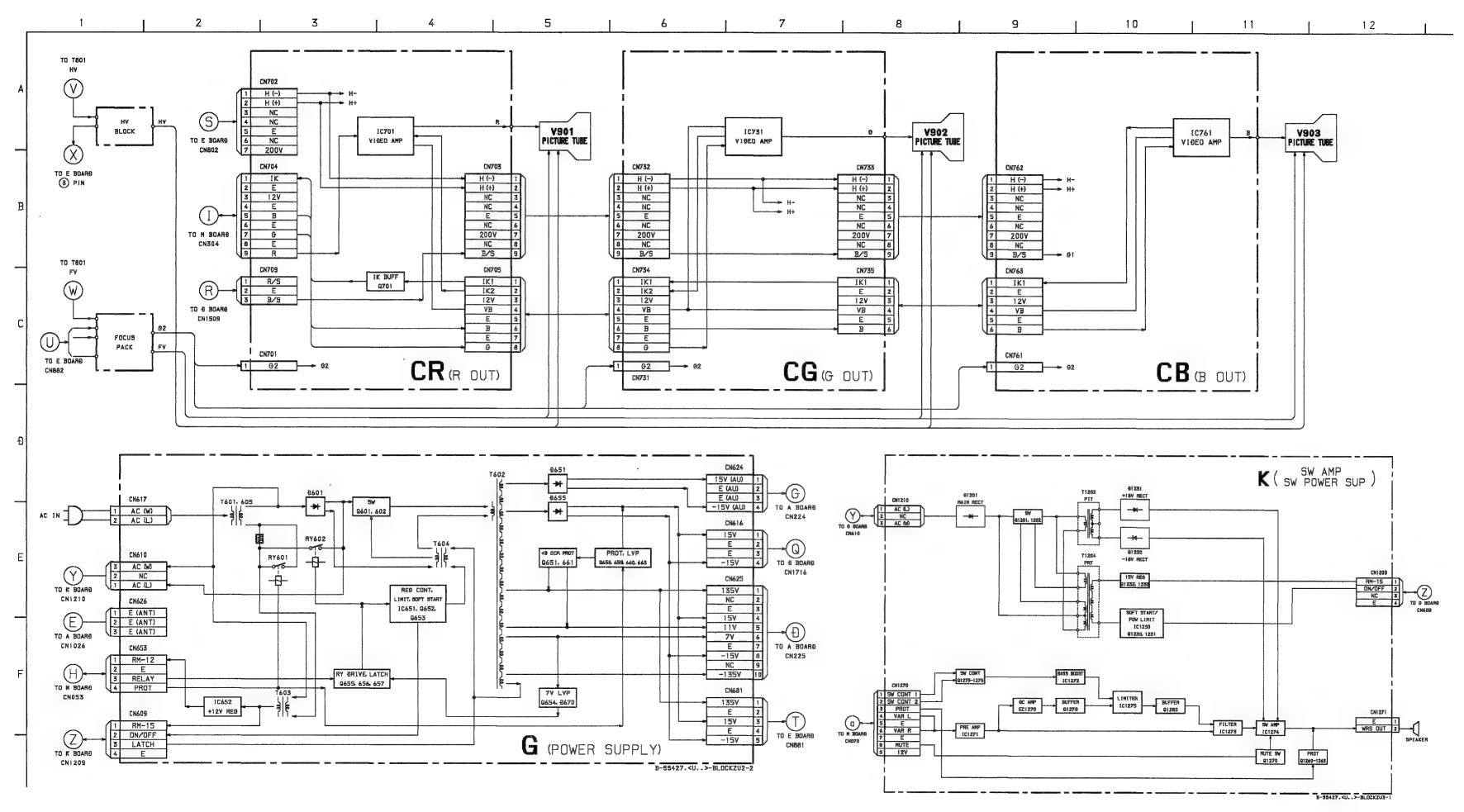
- 29 -



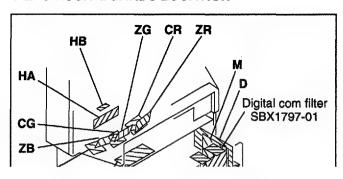
- 30 -

-31 -





### 4-2. CIRCUIT BOARDS LOCATION

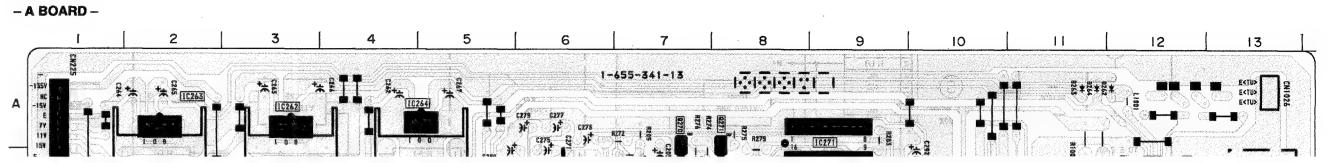


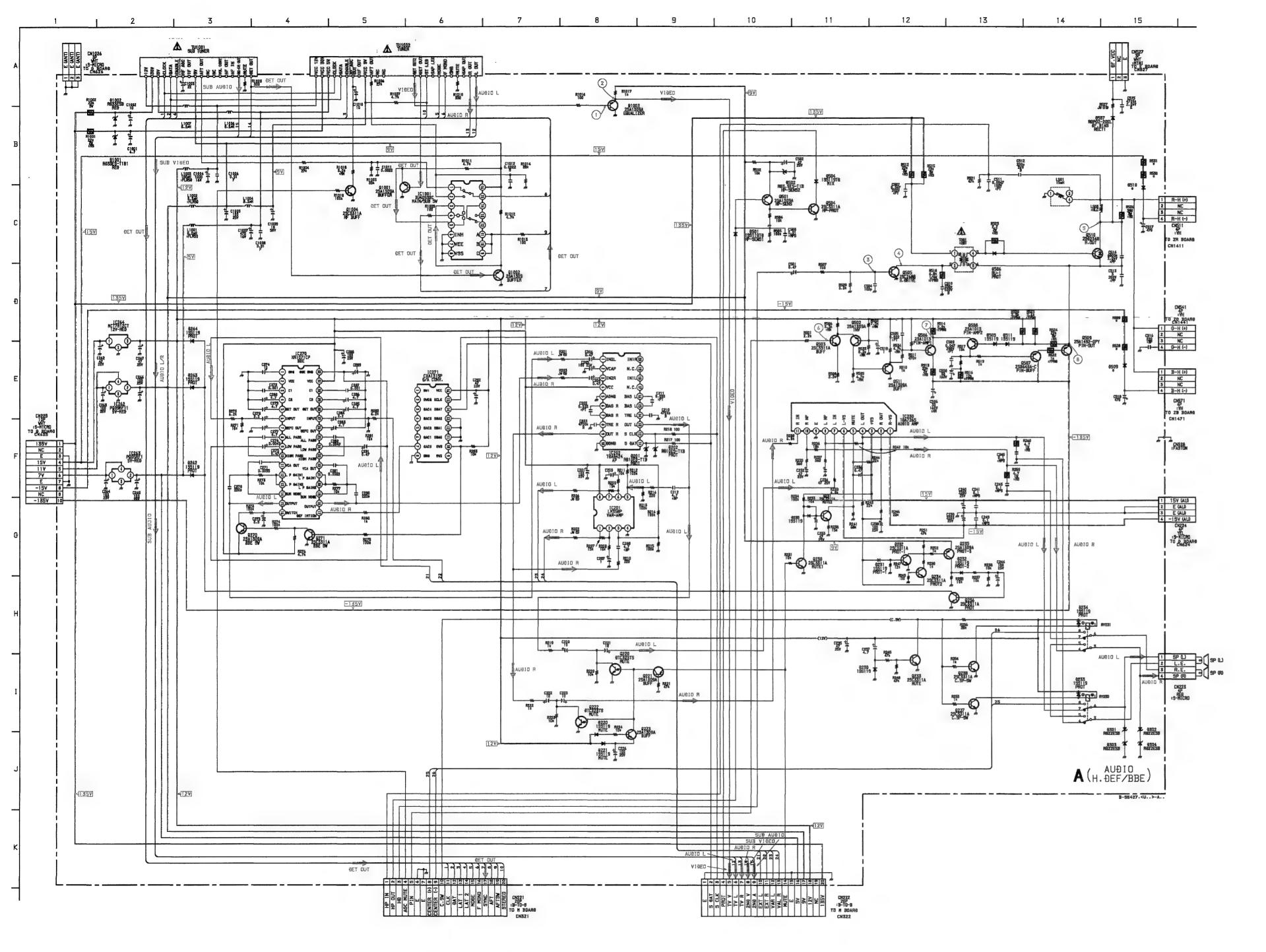
# Reference information RESISTOR : RN METAL FILM : RC SOLID : FPRD NONFRAMMABLE CARBON : FUSE NONFRAMMABLE FUSIBLE : RW NONFRAMMABLE WIREWOUND : RS NONFRAMMABLE METAL OXIDE : RB NONFRAMMABLE CEMENT : ※ ADJUSTMENT RESISTOR COIL : LF-8L MICRO INDUCTOR CAPACITOR : TA TANTALUM



#### A BOARD

	IC
IC201	B 9
IC202	B - 7
IC230	D-8
IC262	A – 3
IC263	A – 2
IC264	A - 5
IC270	B – 6
IC271	.;A − 9
IC1001	F – 11





## A BOARD TRANSISTOR VOLTAGE LIST

						_	_		
	6.1	4	GND	b	6.1	8	120		
1	6.0	5	GND	9	6.1	13	6.1	17	NC
2	12.0	6	6.1	10	GND	14	6.1	18	NC
3	6.0	7	6.1	11	4.6	15	6.1	19	NC
4	12.0	8	6.1	12	4.6	16	6.1	20	NC
1	-16.3	4	0	7	0	10	0		
2	0	5	10.6	8	0	11	0		
3	15.0	6	-16.3	9	GND				
1	11.0	2	9.0	3	GND	4	11.0		
1	7.0	2	5.0	3	GND	4	7.0		
1	15.0	2	GND	3	12.0			,	
1		8		15		22		29	
2	GND	9		16		23		30	
3		10		17		24		31	12.0
4		11		18		25		32	
5		12	GND	19		26			
6		13	GND	20		27			
7		14	GND	21		28			
1	NC	5	NC	9	NC	13	GND		
2	NC	6	NC	10		14			
3	NC	7		11	GND	15			
4	NC	8	GND	12	GND	16	12.0		
1		5		9		13	NC		
2		6 7	GND	10 11		14 15	NC		
	1 2 3 4 1 2 3 4 5 6 7 1 2 3 4 4	2 12.0 3 6.0 4 12.0 1 -16.3 2 0 3 15.0 1 11.0 1 7.0 1 15.0 1 15.0 1 NC 2 NC 3 NC 4 NC	2 6.1 4  1 6.0 5 2 12.0 6 3 6.0 7 4 12.0 8  1 -16.3 4 2 0 5 3 15.0 6  1 11.0 2  1 7.0 2  1 15.0 2  1 15.0 2  1 NC 5 2 NC 6 3 NC 7 4 NC 8	2 6.1 4 GND  1 6.0 5 GND 2 12.0 6 6.1 3 6.0 7 6.1 4 12.0 8 6.1  1 -16.3 4 0 2 0 5 10.6 3 15.0 6 -16.3  1 11.0 2 9.0  1 7.0 2 5.0  1 15.0 2 GND  1 8 2 GND 9 3 10 4 11 5 12 GND 6 13 GND 7 14 GND  1 NC 5 NC 2 NC 6 NC 3 NC 7 4 NC 8 GND	2 6.1	2 6.1	2 6.1	2 6.1	2 6.1

	E	С	В
Q220	GND	0	2.8
Q221	2.8	2.8	2.2
Q222	GND	0	2.8
Q223	11.9	2.8	11.1
Q230	GND	0	0.7
Q231	0	10.6	0
Q232	GND	9.0	0
Q233	GND		
Q234	0	9.0	0
Q235	9.0	0	9.0
Q236	GND	4.6	0
Q237	GND		
Q238	GND		
Q270	12.0		
Q271	GND		
Q501	3.2	0	4.1
Q502	6.9	0.9	6.4
Q503	3.1	6.9	3.7
Q504	GND	4.9	0
Q505	GND	63.7	-0.7
Q506	2.1	-54.0	1.6
Q507	-124.3	-137.3	-121.6
Q508	2.1	-121.6	1.7
Q509	-122.9	-137.3	-123.2
Q510	-122.9	*	-123.5
Q511	1.6	GND	0.9
Q1001		GND	
Q1002	9.0	GND	
21003	5.6	GND	5.1
21004	GND	0	0

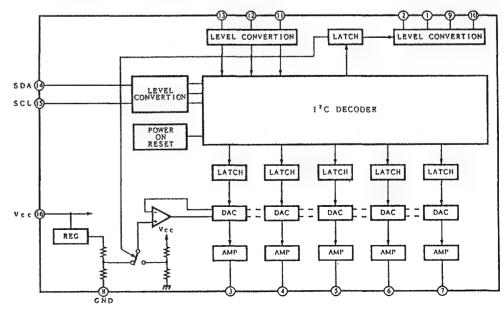
#### A BOARD \* MARK

Ref. No.	KP-46V35 (U/C)	KP-53V35 (US)	KP-61V35 (US)	
D509	V09G	V09G	-	
D510	V09G	V09G	-	
R528	270 3W	270 3W		
R529	270 3W	270 3W		ı
R530	270 3W	270 3W	-	ı
R531	270 3W	270 3W		

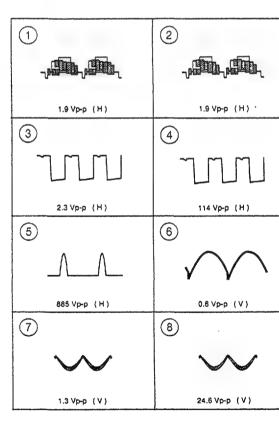
-: NOT MOUNT

# A BOARD IC202 TDA8424 12 C. BUS

## A BOARD IC201 LM358P



#### • A BOARD WAVEFORMS



				LIST			<u> </u>	VOLTA		
IC1501	1	1.5	3	-138	5	0.3	7	15		
	2	1 5.0	4	- 15.0	6	15.0				
IC1601	1	-13.3	6	0.4	11	14.2	16	-150	21	0
	2	-13.3	7	0.4	12	-143	17	-150	22	0
	3	-133	8	GND	13	-14.3	18	150		
	4	0	9	0	14	142	19	-15.0		
	5	0	10	0	15	15.0	20	0		
IC1602	1	-13.3	6	-0.1	11	142	16	-150	21	-0
1	2	-13.3	7	-0.1	12	-143	17	-150	22	03
1	3	-13.3	8	GND	13	-143	18	150		
1	4	02	9	-0.5	14	142	19	-150		
- 1	5	02	10	-0.5	15	150	20	-02		

IC1805  1 0 10 3.4 19 0 28 0 37 0 2 -0.9 11 52 20 -0.5 29 0 38 0 3 0.2 12 0.7 21 50 30 11 39 0 4 -1.1 13 3.2 22 0 31 32 40 -0.5 5 0 14 -21 23 0 32 0.7 41 -0.1 6 -0.4 15 0 24 0 33 51 42 GND 7 51 16 -0.9 25 0.4 34 3.4 8 52 17 0 26 0 35 0 9 -50 18 -0.9 27 0 36 0	IC1803	1	-5.0	2	-150	3	GND				
1   52   20   -05   29   0   38   0   3   0.2   12   0.7   21   50   30   11   39   0   4   -1.1   13   3.2   22   0   31   3.2   40   -0.5   5   0   14   -2.1   23   0   32   0.7   41   -0.1   6   -0.4   15   0   24   0   33   51   42   GND	IC1804	1	50	2	GND	3	15.0				
1	IC1805	L	0	10	3.4	19	0	28	0	37	0
A -1.1		2	- 0.9	11	5 2	20	-05	29	0	38	0
C1806		3	0.2	12	0.7	21	50	30	11	39	0
C1806	(	4	-1.1	13	3.2	22	0	31	3 2	40	-05
T   S1	1	5	0	14	-21	23	0	32	0.7	41	-0.1
R   52		6	-04	15	0	24	0	33	5 1	42	GND
1	}	7	5 l	16	-09	25	0.4	34	3.4		
IC1806  1 02		8	5 2	17	0	26	0	35	0		
2   1.3		9	-50	18	-09	27	0	36	0		
3 50	IC1806	1	02	5	- 0.9	9	-50	13	0 4	17	1.3
IC1807		2	1.3	6	0	10	0.3	14	13	18	-1.6
IC1807	1	3	50	7	-1.0	11	06	15	GND		
IC1808		4	0	8	0	12	-09	16	-15		
IC1809  1 0 10 34 19 0 28 0 37 0 2 -09 11 5.1 20 -0.5 29 0 38 0 3 02 12 0.7 21 50 30 04 39 0 4 -11 13 32 22 0 31 NC 40 0.4 6 0 14 -2.2 23 -0.7 32 NC 41 0 6 -04 15 0 24 0 33 NC 42 GND 7 -50 16 -09 25 0 34 NC 7 -50 16 -09 26 0 35 0 9 -50 18 -09 27 0 36 0  IC1931  1 0 4 12.0 7 04 10 NC 13 0 2 0 5 0 8 NC 11 -120 14 0 3 0 6 0 9 NC 12 GND  IC1932  1 07 4 120 7 -07 10 0 13 0 2 0 5 GND 8 0 11 -120 14 0	IC1807	1	-120	2	-150	3	GND				
2 -09	IC1808	1	120	2	GND	3	150				
3 02   12 0.7   21 50   30 04   39 0     4 -11   13 32   22 0   31 NC   40 0.4     5 0   14 -2.2   23 -0.7   32 NC   41 0     6 -04   15 0   24 0   33 NC   42 GND     7 -50   16 -09   25 0   34 NC     8 51   17 0   26 0   35 0     9 -50   18 -09   27 0   36 0      101931   1 0   4 12.0   7 04   10 NC   13 0     2 0   5 0   8 NC   11 -120   14 0     3 0   6 0   9 NC   12 GND      101932   1 07   4 120   7 -07   10 0   13 0     2 0   5 GND   8 0   11 -120   14 0     101932   1 07   4 120   7 -07   10 0   13 0     101932   1 07   4 120   7 -07   10 0   13 0     101932   1 07   4 120   7 -07   10 0   13 0     101932   1 07   4 120   7 -07   10 0   13 0     101932   1 07   4 120   7 -07   10 0   13 0     101932   1 07   4 120   7 -07   10 0   13 0     101932   1 07   4 120   7 -07   10 0   13 0     101933   1 07   4 120   7 -07   10 0   14 0     101934   1 07   1 07   1 0 0   14 0     101935   1 07   1 0 0   14 0     101936   1 07   1 0 0   14 0     101937   1 07   1 0 0   14 0     101938   1 07   1 0 0   14 0     101938   1 07   1 0 0   14 0     101938   1 07   1 0 0   14 0     101938   1 07   1 0 0   14 0     101938   1 07   1 0 0   14 0     101938   1 07   1 0 0   14 0     101938   1 07   1 0 0   14 0     101938   1 0 0   1 0 0     101938   1 0 0   1 0 0     101938	IC1809	1	0	1	0 34	19	0	28	0	37	0
1		2	-09	1	5.1	20	0.5	29	0	38	0
1	1	3	02	i	2 0.7	2	50	30	0 4	39	0
6 -04	1	4	-11	1	3 32	23	0 2	31	NC	40	0.4
10		б	0	1	4 -2.2	23	3 -0.7	32	NC	4 L	0
8 51 17 0 26 0 35 0 36 0  IC1931 1 0 4 12.0 7 04 10 NC 13 0 2 0 5 0 8 NC 11 -120 14 0 3 0 6 0 0  IC1932 1 07 4 120 7 -07 10 0 13 0 2 0 5 GND 8 0 11 -120 14 0	ĵ	6	-04	1	5 0	2	0	33	NC	42	GND
101931		7	-5 O	1	6 -09	2!	5 0	34	NC		
IC1931		8	5 1	1	7 0	2	5 0	35	0		
2 0 5 0 8 NC 11 -120 14 0 3 0 6 0 9 NC 12 GND  1C1932 1 07 4 120 7 -07 10 0 13 0 2 0 5 GND 8 0 11 -120 14 0		9	-50	1	8 -09	2	7 0	36	0		
3 0 6 0 9 NC 12 GND  1C1932 1 07 4 120 7 -07 10 0 13 0 2 0 5 GND 8 0 11 -120 14 0	IC1931	1	0	4	12.0	7	0.4	10	NC	13	0
tC1932 1 07 4 120 7 -07 10 0 13 0 2 0 5 GND 8 0 11 -120 14 0		2	0	5	0	8	NC	11	-150	14	0
2 0 5 GND 8 0 11 -120 14 0		3	0	6	0	9	NC	12	GND		
2 0 5 CND 8 0 11 -120 14 0	IC1932	1	07	4	120	7	-07	10	0	13	0
3 GND 6 0 9 0 12 0		2	0	5	GND	8	0	11	-120	1.4	0
i e e e e e e e e e e e e e e e e e e e		3	GND	6	0	9	0	12	0	Colombron B	rinings

## D BOARD TRANSISTOR VOLTAGE LIST

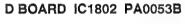
7 -1.1

2 50

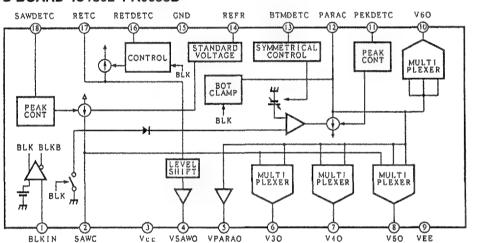
13 3.2

9 -50 10 03 11 0.6

1	E	C	8	
Q1501	0.2	9.0	-0.5	
Q1551	4.0	2.1	3.4	
Q1552	1.5	12.0	2.1	
Q1701	GND	3.5	0.3	
Q1801	2.6	5.0	3.2	
Q1802	-2.5	5.0	-3.1	
Q1803	GND	4.8	0	
Q1804	-0.3	0	-0.9	
Q1805	GND	4.8	0	
1				
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		



18 -16



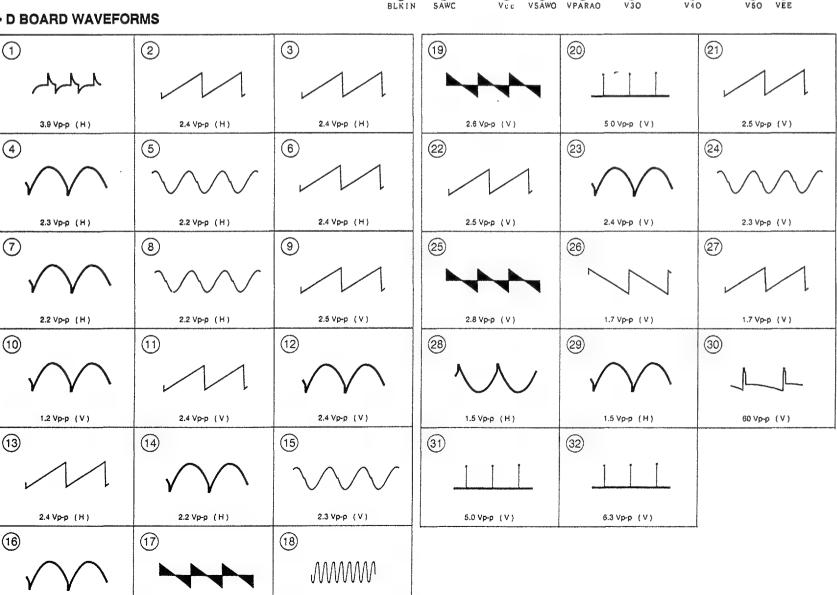
#### • D BOARD WAVEFORMS

12 NC 13 NC

1 52

2 -0.9

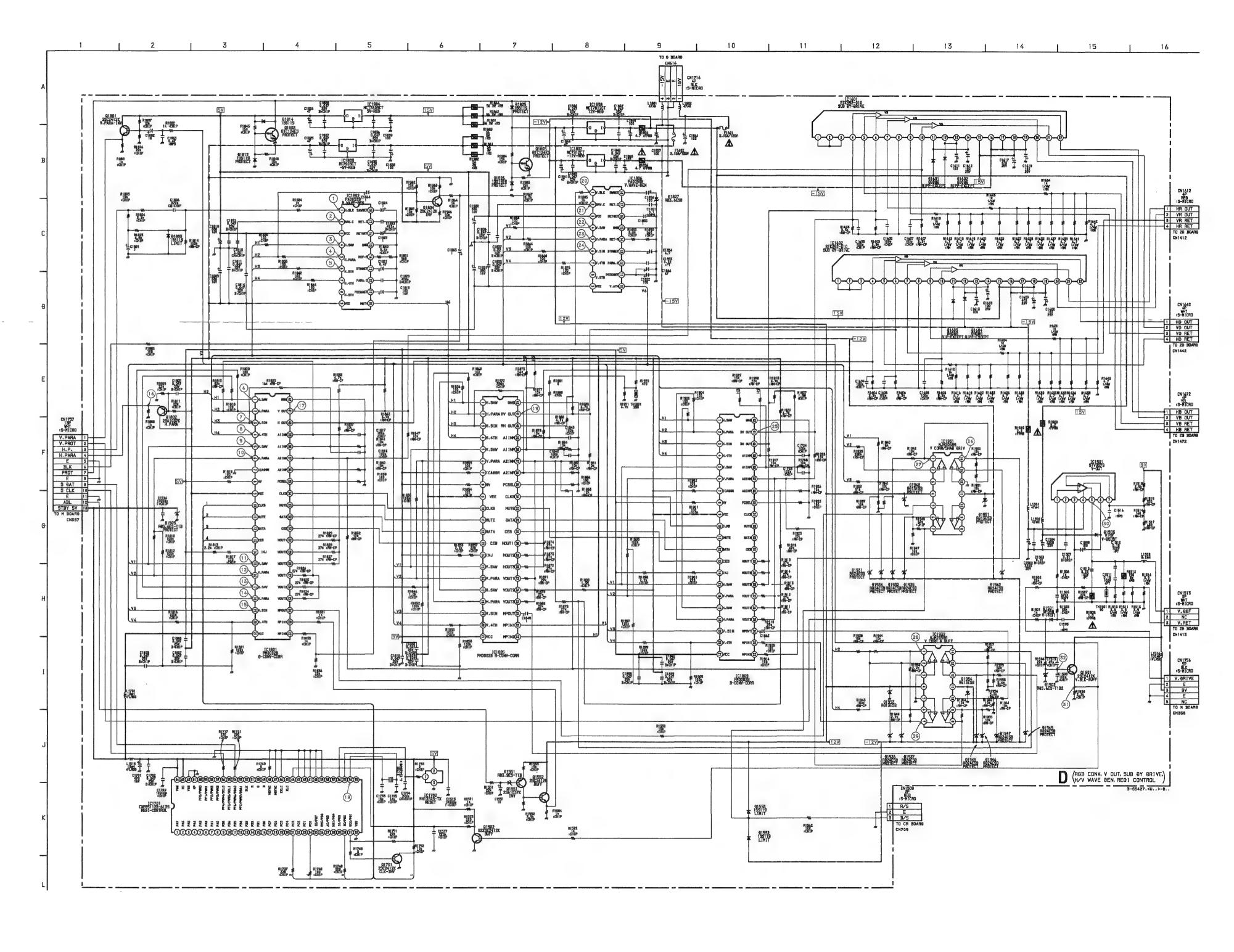
6 -04 7 GND 8 52 9 -50



4.2 MHz

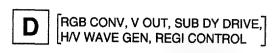
**- 45 -**

2.6 Vp-p (V)

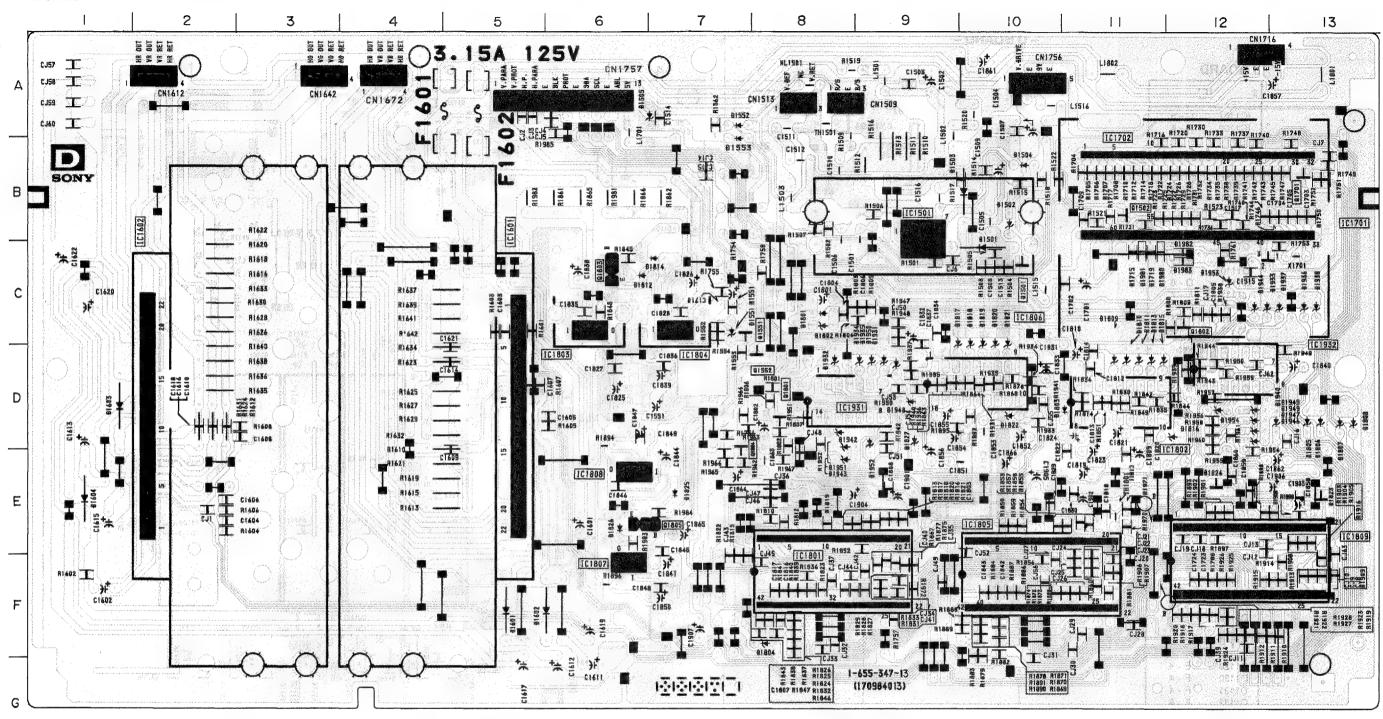


2.1 Vp-p (H)

**-46-**



## - D BOARD -



#### D BOARD

IC1501	1808 E-7 1809 F-12 1931 D-9 1932 D-13		C-6 E-8 E-7	D1602 D1603 D1604 D1803 D1812	F-6 D-2 E-1 D-11 C-7	D1936 D1937 D1942 D1945 D1946	C - 13 C - 13 E - 9 D - 13 E - 13
101102 0 12							
IC1802 D - 12 Q1 IC1803 D - 6 Q1 IC1804 D - 7 Q1 IC1805 F - 10 Q1	1501 C - 10 1502 B - 11 1551 D - 8 1552 D - 8 1701 B - 13 1801 D - 8	D1501 D1502 D1503 D1505 D1551 D1552 D1553	C-10 B-10 B-10 A-6 D-8 B-8 B-8	D1814 D1825 D1826 D1827 D1931 D1932 D1934	C-7 E-7 E-6 D-9 D-9	D1947 D1948 D1949 D1951 D1953 D1954	E - 13 D - 9 D - 13 E - 9 C - 12 D - 12



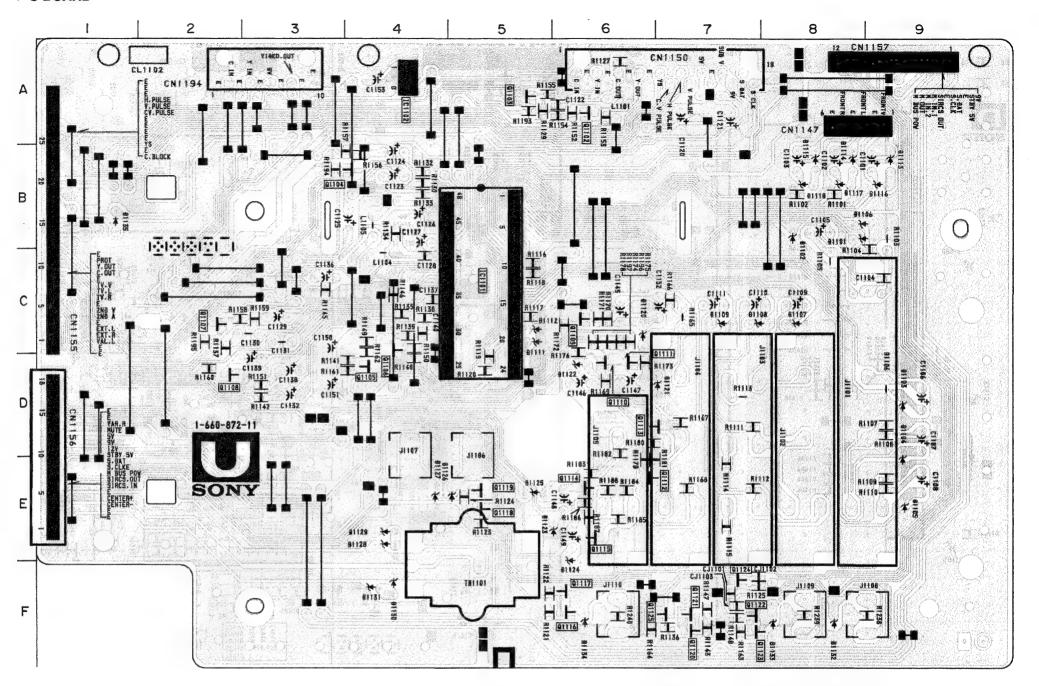
#### - U BOARD -

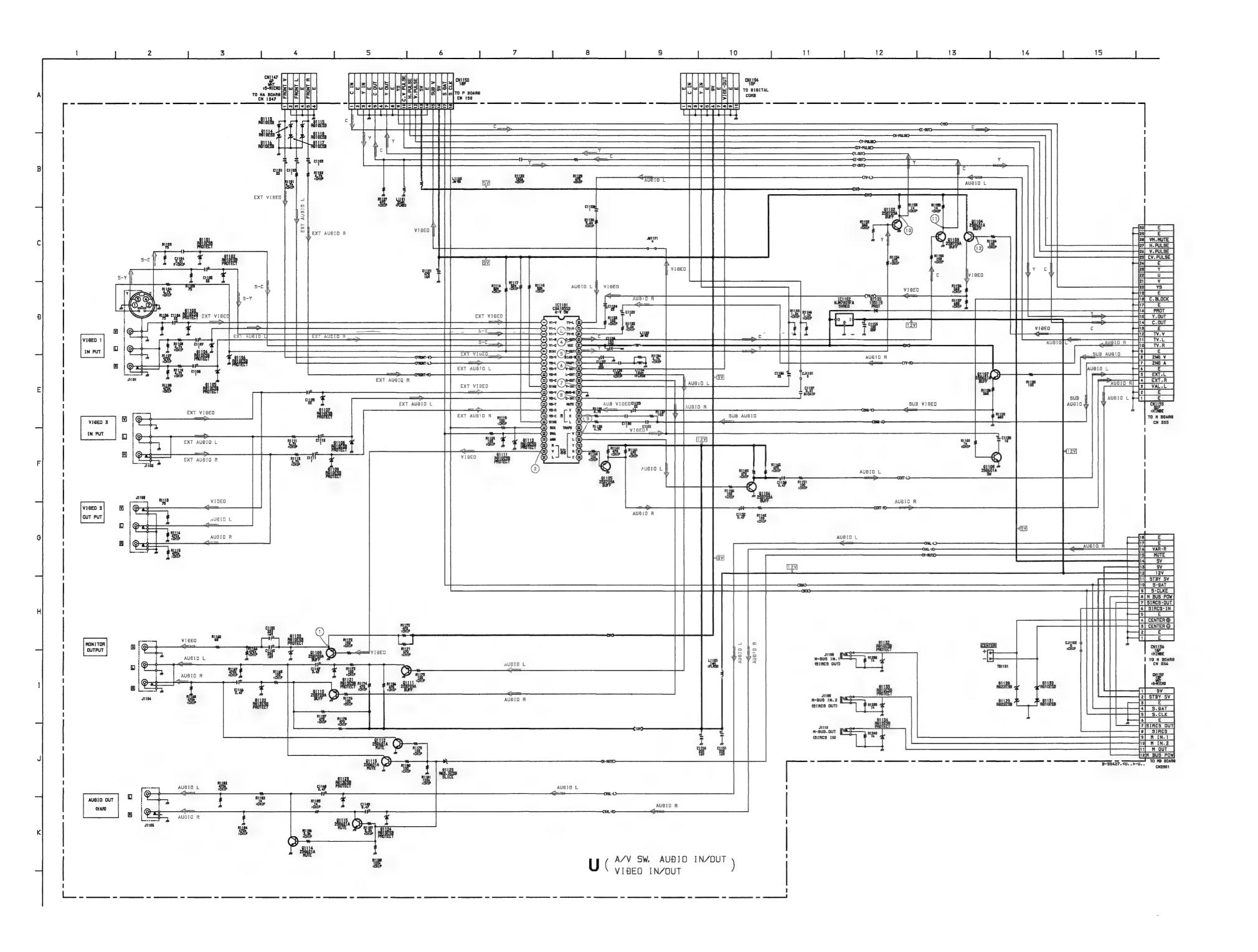
U BOARD									
IC									
IC1101 IC1102	C – 5 A – 4								
TRANSISTOR									
Q1102 Q1103 Q1104 Q1105 Q1106 Q1107 Q1108 Q1109 Q1110 Q1111 Q1111 Q11113 Q1114 Q1115	A - 6 A - 5 B - 4 D - 4 D - 2 D - 2 D - 6 D - 7 D - 7 E - 6								

#### DIODE B-8 D1101 D1102 B-8 D1103 D-9 D-9 D1104 D1105 E-9 D1106 B - 8 D1107 C-8 D1108 C-7 C-7 D1109 D1111 D1112 C-5 D1113 B - 9 D1114 B-8 D1115 B-8 D1116 B-9 D1117 B - 8D1118 D1120 C-6 D1121 D-7 D1122 D-6 D1123 E-6 D1124 F-6 D1125 E-5 D1128 D1129 E - 4 F - 4 D1130 D1131 F-8 D1132 D1133 F-8 D1134 F-6

D1135

B-1





U BOARD IC VOLTAGE LIST

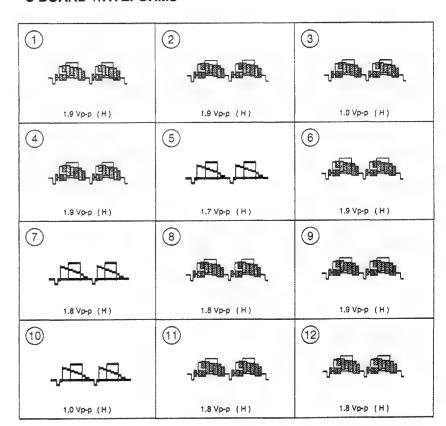
ALL VOLTAGES ARE IN V

IC1101	1	4.7	11	NC	21	NC	31	4.7	41	4.7
	2	4.7	12	5.0	22	NC	32	4.7	42	4.7
	3	4.7	13	4.7	23	4.6	33	4.7	43	4.4
	4	4.7	14	4.7	24	NC	34	NC	44	9.0
	5	4.7	15	NC	25	NC	35	4.7	45	4.7
	6	5.0	16	4.7	26	4.8	36	GND	46	4.7
	7	3.6	17	NC	27	NC	37	4.7	47	4.7
	8	4.7	18	5.0	28	4.8	38	4.8	48	4.7
	9	NC	19	4.6	29	4.6	39	4.8		
	10	4.7	20	4.6	30	4.7	40	4.6		

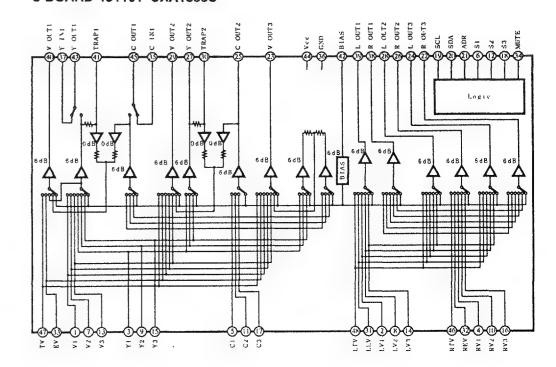
## U BOARD TRANSISTOR VOLTAGE LIST

	E	С	В
Q1102	3.1	GND	2.5
Q1103	5.3	GND	4.7
Q1104	5.1	9.0	5.8
Q1105	5.4	GND	4.8
Q1106	5.4	GND	4.8
Q1107	0	9.0	-0.3
Q1108	GND	0.9	-1.1
Q1109	5.3	GND	4.6
Q1110	5.4	GND	4.8
Q1111	5.4	GND	4.8
Q1112	GND	0	0
Q1113	GND	0	0
_Q1114	GND_	0	0 _
Q1115	GND	0	0

#### • U BOARD WAVEFORMS



## U BOARD IC1101 CXA1855S



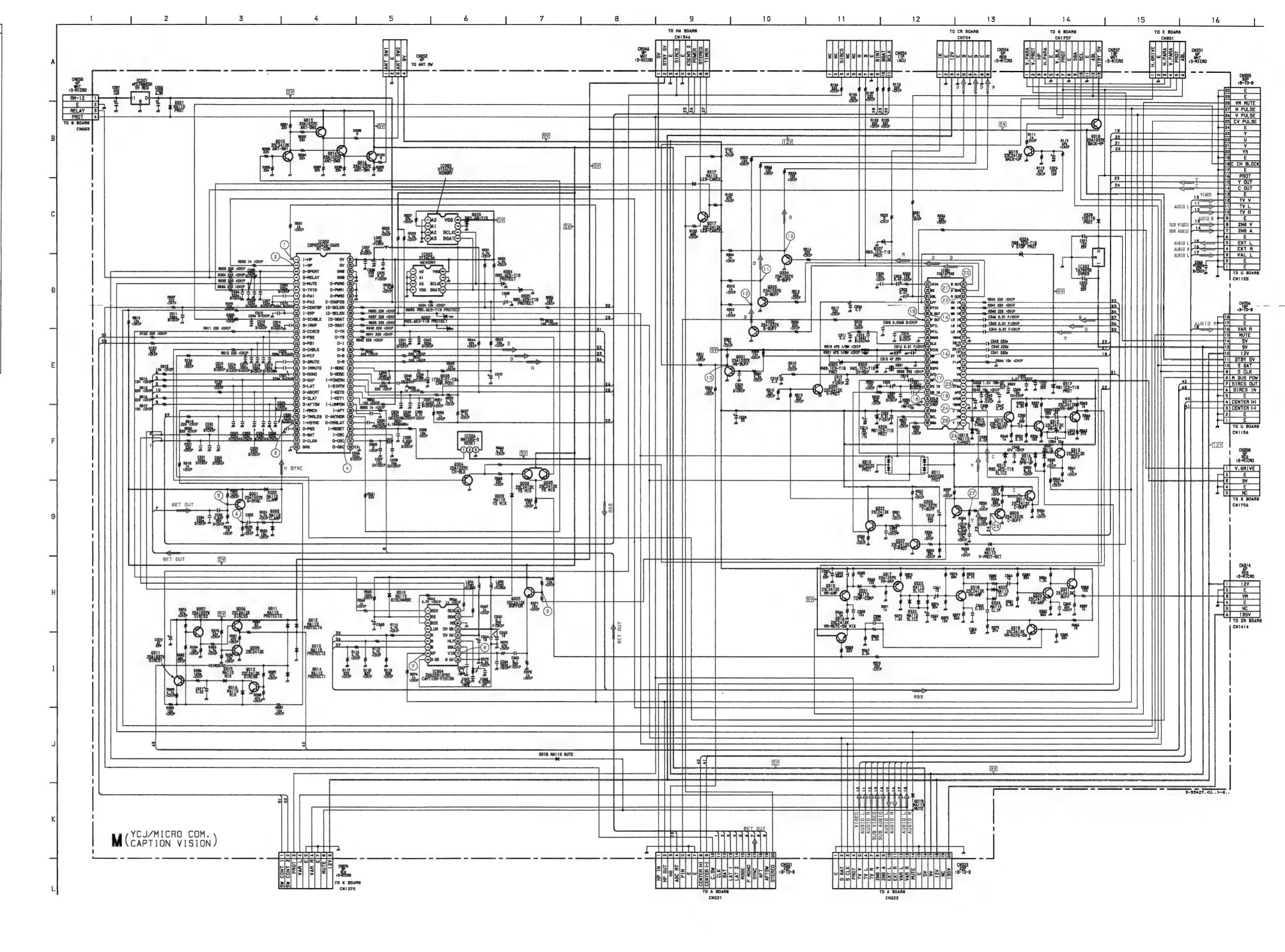
0001	1	12.0	2	GND	3	5.0				
(C002	1	0.8	15	0	29	0	43	5.1	57	3.2
	2	0.2	16	0	30	5.0	44	5.1	58	GND
	3	4.8	17	0	31	5.0	45	3.0	59	GND
	4	4.5	18	5.1	32	GND	46	3.0	60	GND
	5	0	19	0	33	0	47	0	61	GND
	6	5.2	20	0	34	2.6	48	0	62	GND
	7	5.1	21	0	35	2.3	49	0	63	5.0
	8	0	22	0	36	5.1	50	NC	64	5.0
	9	0	23	Ø	37	0	51	0		
	10	5.1	24	0	38	5.1	52	0		
	11	0	25	0	39	2.3	53	4.6		
	12	0	26	5.1	40	GND	54	4.6		
	13	0	27	5.1	41	5.1	55	4.6		
	14	0	28	0	42	5.1	56	4.6		
IC003	1	GND	3	GND	5	4.6	7	GND		
	2	GND	4	GND	6	4.6	8	5.0		
[C004	1	0	5	0	9	GND	13	2.2	17	5.0
	2	5.0	6	0	10	GND	14	5.0	18	5.0
	3	0	7	0	11	1.8	15	5.0		
	4	NC	8	0.9	12	1.7	16	GND		
IC005	1	GND	3	GND	5	4.6	7	GND		
	2	5.1	4	GND	6	4.6	8	5.Ò		
1C006	1	5.1	2	5.2	3	GND				
IC301	1	4.4	11	0	21	0	31	3.7	41	3.4
	2	7.4	12	5.0	22	1.7	32	3.0	42	3.6
	3	5.4	13	5.7	23	1.7	33	3.7	43	3.0
	4	GND	14	5.7	24	1.6	34	GND	44	GND
	5	4.1	15	GND	25	5.4	35	4.7	45	3.6
	6	5.5	16	6.0	26	NC	36	5.1	46	9.0
	7	2.5	17	6.0	27	<b>3</b> ¢c	37	4.0	47	4.6
	8	9.0	18	6.0	28	8.9	38	GND	48	4.6
	9	0	19	6.0	29	NC	39	2.5		
	10	0	20	0	30	3.0	40	4.3		
IC302	1	5.0	2	GND	3	9.0				

	3	С	В
Q001	5.0	0.8	5.3
Q002	0	5.0	0.7
Q003	0	5.0	0
Q004	0.7	GND	0
Q005	3.4	5.0	4.2
Q006	0	5.2	0.7
Q007	5.2	0	5.1
Q008	0	0	5.1
Q009	GND	5.2	0
Q010	0	0	5.1
Q011	5.2	5.1	4.8
Q012	GND	5.0	0
Q013		5.0	
Q014	5.0		
Q015	GND		
Q016	5.0		
Q017	9.0	5.3	5.7
Q018	5.0	5.0	4.4
Q019	GND	0.2	0.7
Q301	2.7	GND	4.1
Q302	2.6	GND	1.9
Q303	2.6	GND	1.9
Q304	2.6	GND	1.9
Q305	GND	8.9	0
Q307	GND	0	0.7
Q308	3.1	GND	2.3
Q309	4.0	GND	3.4
Q310	6.8	9.0	7.4
Q311	5.4	9.0	6.1
Q312	1.5	7.6	2.2
Q313	0.9	9.0	0.4
Q314	0.9	6.0	1.5
Q315	5.3	9.0	6.0
Q316	0	9.0	0
Q317	8.2	3.7	7.6
Q318	0.7	5.9	1.4
Q319	GND	0.3	0
Q320	1.2	6.1	1.8
Q321	5.4	9.0	6.1
Q322	2.5	9.0	3.2

## M BOARD WAVEFORMS

1	2	3	19	20
			A.A.	bergo bergo
4.5 Vp-p (H)	5 Vp-p (V)	4.5 Vp-p (H)	1.5 Vp-р (Н)	2.9 Vp-p (H)
4	5	6	21	22
$\mathcal{M}$	-party and the		للهاالهاا	Jan Jan
4.2 MHz	1.8 Vp-p (H)	4.5 Vp-p (H)	2.8 Vp-p (H)	3.0 Vp-p (H)
7	8	9	<b>3</b>	24
	,A,A	ALPA,	www.	+ + + + + + + + + + + + + + + + + + + +
4.5 Vp-p (H)	0.8 Vp-p (H)	0.8 Vp-p (H)	3.5795400 MHz	0.8 Vp-p (H)
10	11)	12	25	26
	Ltaj-Ctaj-C	begg begg	,19,19,	_FL_FL_
3.0 Vp-p (H)	2.9 Vp-p (H)	3.0 Vp-p (H)	1.0 Vp-p (H)	1.7 Vp-p (H)
13	14	15	27	28
		$\wedge \wedge \wedge$		+[]+[]+
2.6 Vp-p (H)	1.6 Vp-p (V)	0.6 Vp-p (V)	1.7 Vp-p (H)	1.3 Vp-p (H)
16	17)	18		

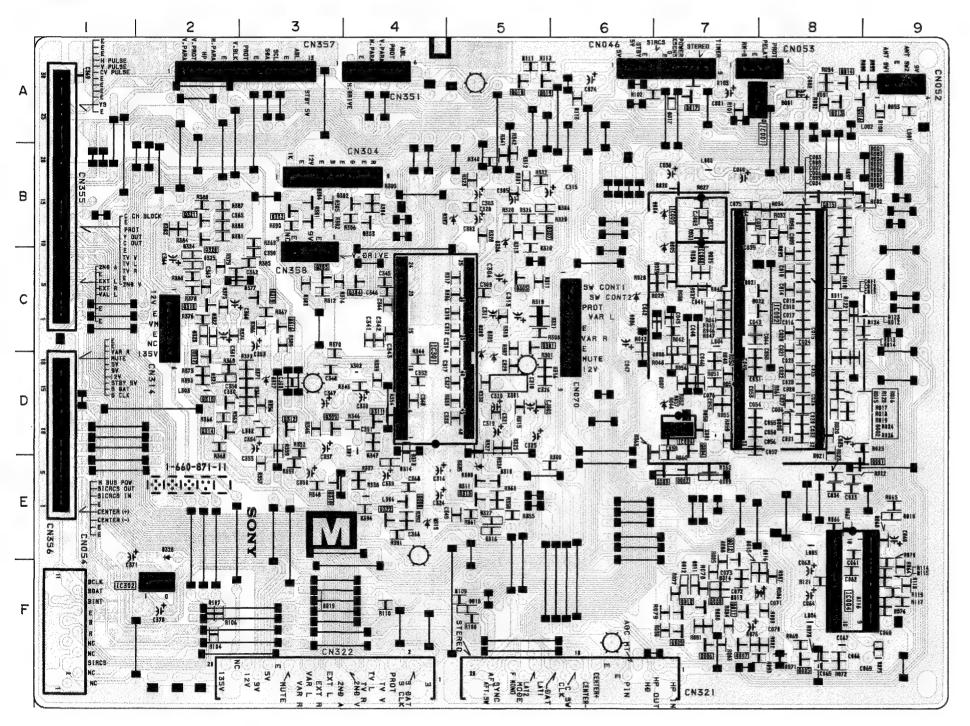
6.2 Vp-p (H) 1.5 Vp-p (H)



Schematic diagram



## - M BOARD -



## M BOARD

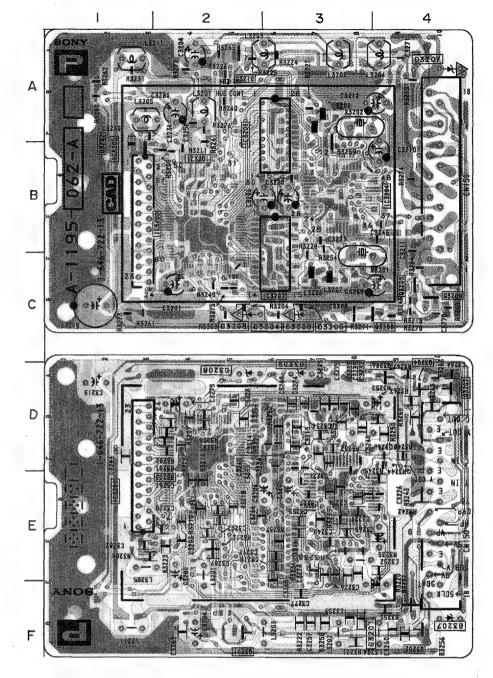
1	С	Q319 Q320	C - 3 C - 2
IC001 IC002	A - 8 C - 8	Q321 Q322	B 2 E 4
IC003 IC004 IC005	C - 7 F - 8 B - 7	DIC	ODE
IC006 IC301 IC302	D - 7 D - 4 F - 2	D001 D002 D003 D004	A - 8 D - 8 D - 8 B - 7
TRANS	SISTOR	D005 D006	C - 7 C - 6
Q001 Q002 Q003 Q004 Q005 Q006 Q007 Q009 Q011 Q012 Q013 Q016 Q017 Q018 Q019 Q301 Q302 Q303 Q304 Q305 Q307 Q308 Q309 Q311 Q309 Q311 Q312 Q311 Q312 Q311 Q312 Q313 Q314 Q315 Q316 Q317 Q316 Q317 Q316 Q317 Q316 Q317 Q318	9777877778888875553345543343522322 	D006 D007 D008 D009 D010 D011 D012 D013 D014 D015 D016 D017 D018 D019 D020 D306 D307 D308 D309 D310 D311 D312 D313 D314 D316 D316 D317 D321 D326 D327 D328	CDDEEFFFFFAFFBCBECEEBEEEDDCCCCBEE

# P [PICTURE IN PICTURE]

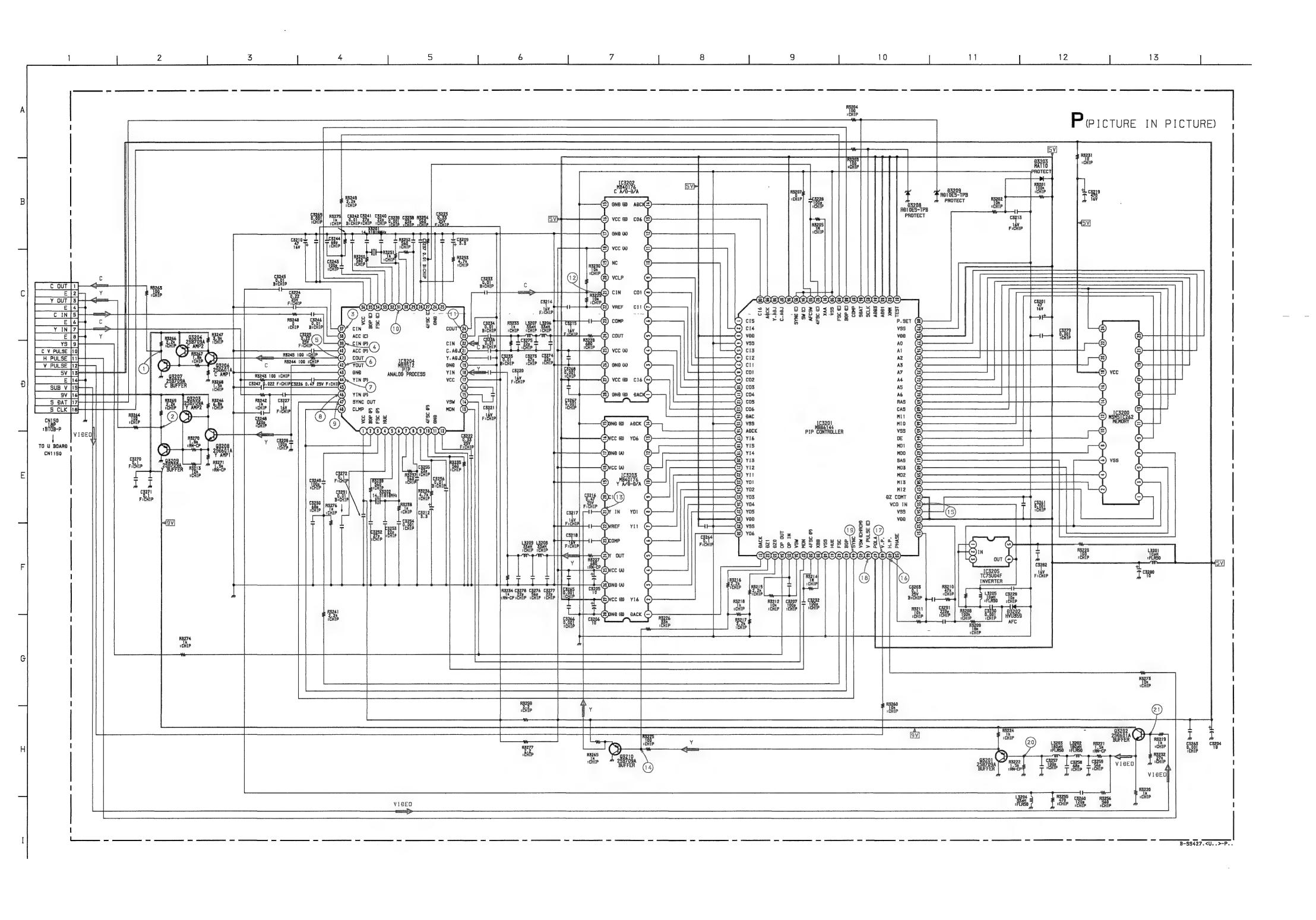
#### **P BOARD**

10	С			
IC3200	E – 1			
IC3201	B - 2			
IC3202	C-3			
IC3203	B - 3			
IC3204	B-3			
IC3205	B - 1			
TRANSISTOR				
Q3201	F-2			
Q3202	F-4			
Q3203	C-4			
Q3204	D-4			
Q3206	D-4			
Q3207	D-4			
Q3208	C-3			
Q3209	C-4			
Q3210	A-2			
DIODE				
D3202	B – 1			
D3203	D-2			
D3208	D - 2			
D3209	D-3			

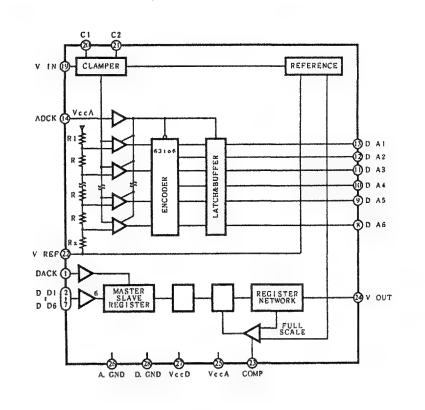




- Pattern from the side which enables seeing.
- Pattern of the rear side.



# P BOARD IC3202, IC3203 MB40176



BOAF	RD IC	VOL	TAGE	LIST			ALL	VOLT	AGES	ARE	IN	\
(C3200	ı	*	6	GND	11	23	16	21	21	2.5		
	2	*	7	1.5	12	2.4	17	2.5	22	2.5		
	3	GND	8	*	13	4.0	18	5.0	23	2 3		
	4	*	9	2.0	14	3.2	19	2.5	24	4.0		
	6	*	10	1.9	15	2.7	20	2.5		4.0		
IC3201	1	3.1	21	2.0	41	4.9	61	*	81	5.0		,,,,,,,
	2	3.1	22	2.3	42	2.5	62	*	82	5.0		
	3	50	23	5.0	43	4.7	63	*	83	5.0		
	4	GND	24	5.0	44	3.7	64	*	84	5.0		
	5	0	25	0	46	NC		GND	-			
	6	2.9	26	0	46	0	65 66		85	4.6		
	7	2.8	27	5.0	47	5.0		2.3	86	4.6		
	8	0	28	5.0		0.2	67	2.4	87	NC		
					48		68	4.0	88	4.7		
	9	0	29	GND	49	0.8	69	3.2	89	2.5		
	10	0.2	30	0	50	2.5	70	2.7	90	GND		
	11	0.2	31	2.9	51	2.5	71	2.1	91	2.5		
	12	0.2	32	2.9	52	3.4	72	2.5	92	2.4		
	13	4.9	33	2.2	53	5.0	73	2.5	93	GND		
	14	2.6	34	4.9	54	GND	74	2.5	94	GND		
	15	GND	35	5.0	55	2.5	75	2.5	95	GND		
	16	2.7	36	5.0	56	5.0	76	25	96	50		
	17	0	37	0.2	57	*	77	2.3	97	NC		
	18	2.9	38	2.4	58	*	78	5.0	98	NC		
	19	0.7	39	2.5	59	*	79	GND	99	2.7		
	20	1.9	40	GND	60	*	80	4.9	100	0.8		
IC3202	1	2.6	7	0	13	0.8	19	NC	25	5.0	*******	
	2	4.9	8	2.8	14	2.7	20	NC	26	GND		
	3	0.2	9	2.9	15	GND	21	4.5	27	5.0		
	4	0.2	10	0	16	5.0	22	4.1	28	GND		
	6	0.2	11	3.1	17	GND	23	2.8	**0	GIID		
	6	0	12	3.1	18	50	24	4.0				
fC3203	1	2.9	7	5.0	13	0	19	GND	25	5.0		*****
	2	0	8	2.3	14	2.7	20	NC	26	GND		
	3	5.0	9	2.0		GND						
	3	0.0	10	1.9	15 16		21 22	4.5	27	5.0		
	5	0		.0.7	17	5.0 CND		4,1	28	GND		
	6	5.0	11	2.9	18	GND 5.0	23 24	2.8 3.8				
IC3204	1	50	6	3.2	11	GND	16	2.4		26		_
	2	4.7	7	2.6	12	0.2			21	36		
	3	3.7	8	2.5		0.2	17	50	22	2.9		
	3		9		13		18	29	23	GND		
	5	3.3 3.4	10	2 8 2.5	14 15	49	19 20	GND 36	24 25	18		
										-		
10222				0	36	50	41	2.0	46			
IC3204	26	GND	31	v	30					2.3		
IC3204			31 32							2.9 3.7		
IC3204	27	2.5	32	3.4	37	1.5	42	1.5	47	3 7		
1C3204												

2 2.5 3 GND 4 2.5 5 4 9

1	2	3
+	.ea.ea.	+[]+[]+
1.3 Vp-p (H)	0.9 Vp-p (H)	0.5 Vp-р (Н)
4	5	6
+ + + + + + + + + + + + + + + + + + + +	+ + + +	a,ea,
0.5 Vp-p (H)	0.6 Vp-p (H)	0.9 Vp-р (Н)
7	8	9
	,ra,ra,	
0.9 Vp-p (H)	0.9 Vp-p (H)	3.5 Vp-p (H)
10	11)	12
$\mathcal{M}$	+()+()+()+	+ + + + + + + + + + + + + + + + + + + +
14.32 MHz	0.6 Vp-p (H)	0.6 Vp-p (H)
13	14	15
	1818L	<b>/////////////////////////////////////</b>
0.8 Vp-p (H)	0.8 Vp-p (H)	
16	17	18
4.5 Vp-p (H)	5.0 Vp-p (V)	5.0 Vp-p (V)
19	@	21)
	_E1_E1_	-party party
3.5 Vp-p (H)	0.9 Vp-p (H)	1.7 Vp-p (H)

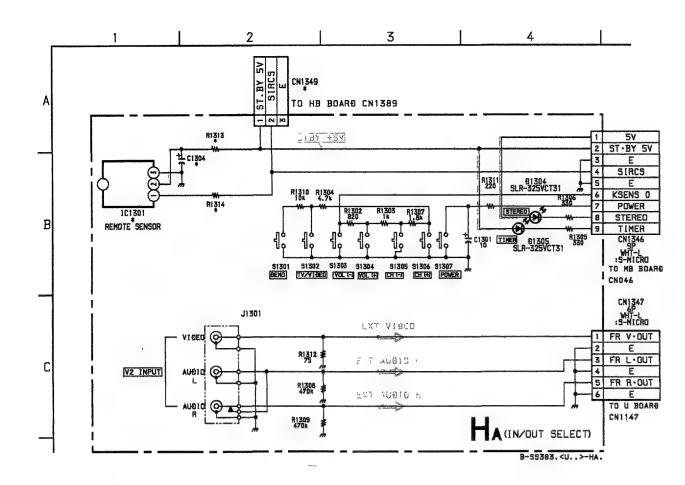
• P BOARD WAVEFORMS

# P BOARD TRANSISTOR VOLTAGE LIST

3	C	8	
26	GND	1.9	
3.8	9.0	4.4	
9.0	1.6	86	
9.0	26	8.5	
1.3	8 5	1.9	
3.3	GND	2.6	
0.9	8.5	1.5	
2.3	GND	1.6	
3.2	GND	2.6	
	26 3.8 9.0 9.0 13 3.3 0.9 2.3	26 GND 3.8 9.0 9.0 1.6 9.0 26 1.3 85 3.3 GND 0.9 8.5 2.3 GND	26 GND 1.9 3.8 9.0 4.4 9.0 1.6 86 9.0 26 85 1.3 85 1.9 3.3 GND 2.6 0.9 8.5 1.5 2.3 GND 1.6

**- 65 -**

**-67 -**



# HA BOARD \* MARK

Ref. No.	KP-46V35 (U/C)	KP-53V35 (US)	KP-61V35 (US)
C1304	4444	-	10 50V
CN1349	0	0	_
IC1301	-	-	SBX1780-51
R1313	_	_	JW (5.0)
R1314	_		100

# HA BOARD IC VOLTAGE LIST

1301	1	5.1	2 {	5.1 3	GND	
			ALL	VOLTAGES	ARE	IN V

○ : TO BE MOUNT - : NOT MOUNT

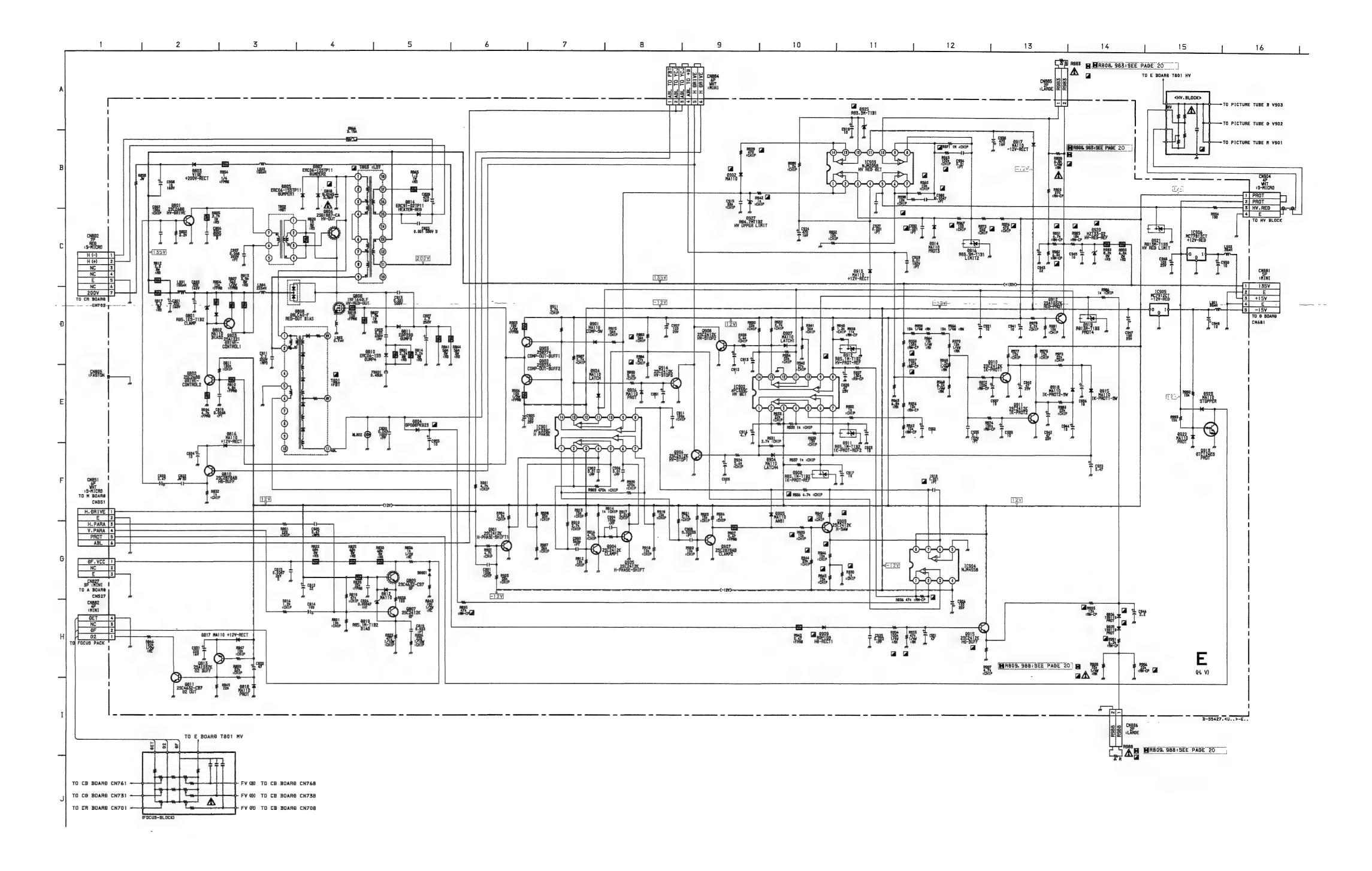
BOAR	D IC	VOLT	AGE	LIST			ALL	VOLTA	GES .	ARE IN V
IC901	1	-6.3	4	3.9	7	4.8	10	4.0	13	-11.6
	2	6.3	5	7.7	8	2.5	11	0	14	2.0
	3	12.0	6	7.7	9	2.8	12	-12.0		
IC902	1	0.2	4	6 2	7	0	10	4.0	13	0.2
	2	0	6	4.8	8	5.2	11	0	14	0
	3	12.0	6	5.2	9	50	12	GND		
IC903	1	3.9	4	11.6	7	76	10	7.6	13	112
1	2	3.9	5	7.6	8	3.9	11	-11.1	14	11.2
	3	3.9	6	7.6	9	7.6	12	0.4		
IC904	1	8.9	3	89	5	GND	7	2.2		
	2	8.9	4	-12.0	6	0.2	8	12.0		
(C905	1	-120	2	-150	3	GND				
IC906	1	120	2	150	3	GND				

# F BOARD TRANSISTOR VOLTAGE LIST

E BOARD TRANSISTOR VOLTAGE LIST							
	E	С	В				
Q801	GND	106.7	-0.3				
Q802	2.1	131.7	2.5				
Q803	1323	1068	1317				
Q806	519	135.6	51.9				
Q807	2 7	11.6	3 3				
Q809	119	3540	123				
Q810	2.1	11.7	2.6				
Q811	GND	6420	0				
Q813	12.3	0	12.3				
Q901	GND	3.9	03				
Q902	1.9	-12.0	2.0				
Q903	1.9	12.0	2.0				
Q904	GND	06	0.6				
Q905	GND	7.7	0.3				
Q906	GND	2.6	0.2				
Q907	GND	06	0.5				
Q908	GND	26	0.2				
<b>Q</b> 909	02	2.2	-2.1				
Q910	GND	0	0.7				
Q911	GND	0	0.7				
Q912	107	GND	101				
Q913	GND	3.4	-03				
Q914	GND	2 6	-0.6				
Q915	0	120	0				
	S	D	C				
Q808	0	51.9	1.9				

**-71 -**

-72 -

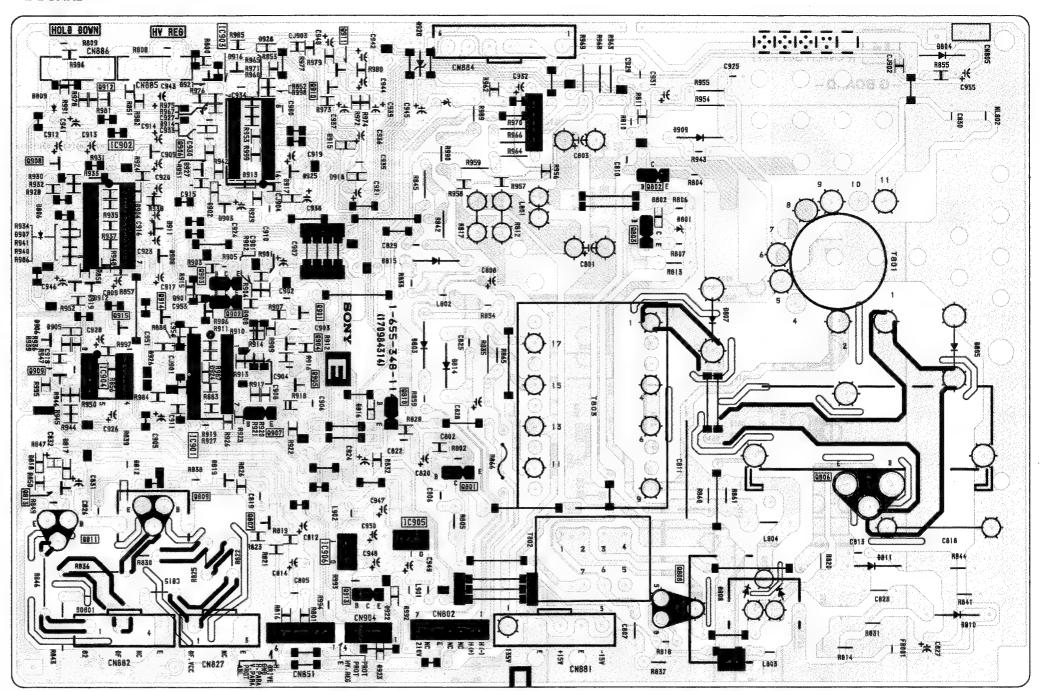


<del>-</del> 70 -

**-73 -- 74 -**



#### - E BOARD -

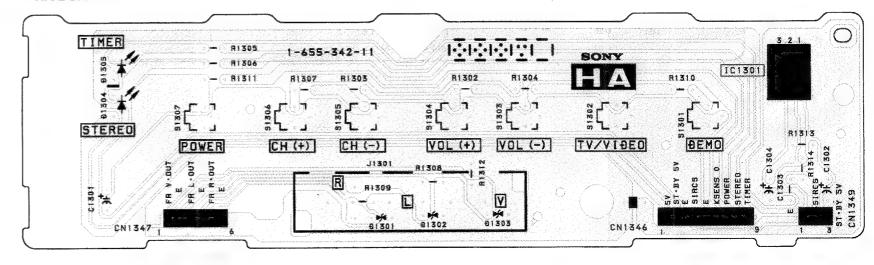


# 120

#### NOTE:

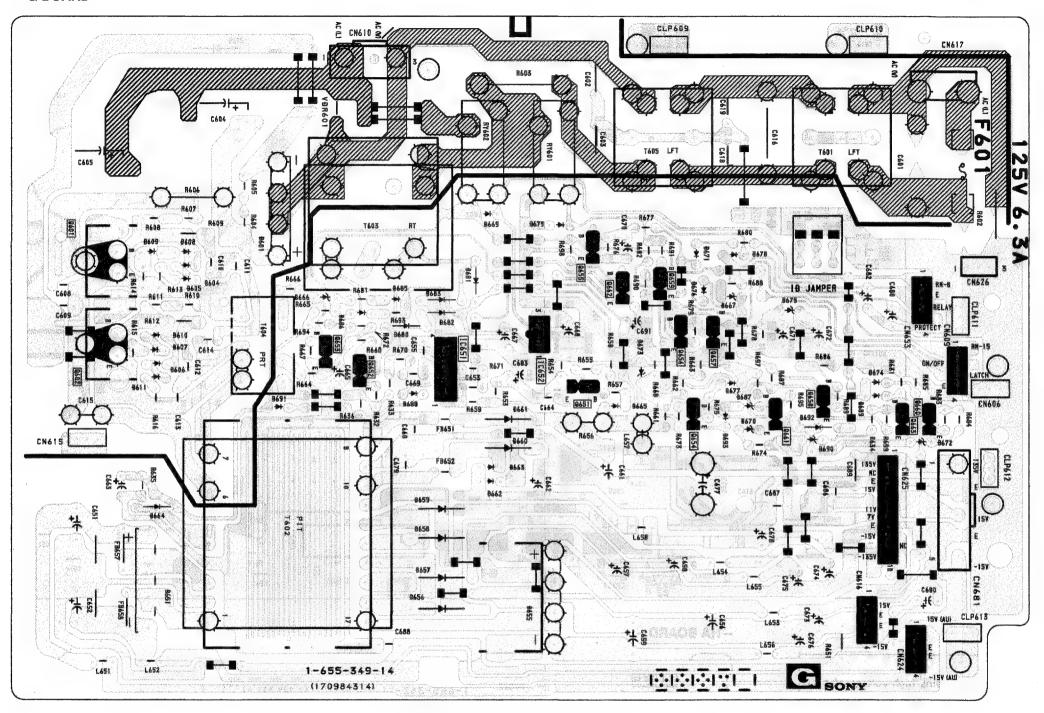
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

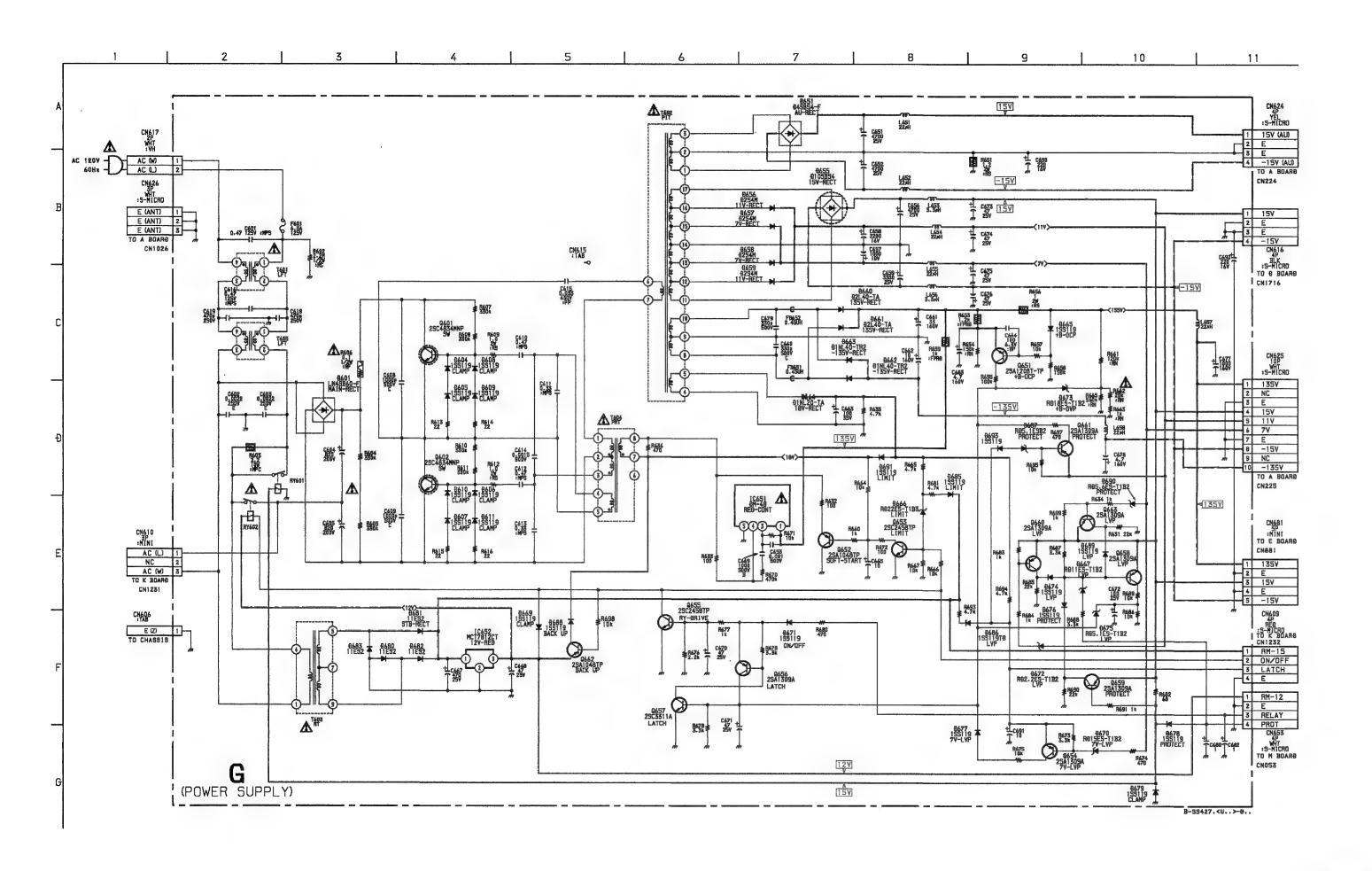
#### - HA BOARD -





# - G BOARD -





THE VOLTAGE VALUES FOR Q602 AND Q603 ARE MEASURED TAKING Q602 EMITTER AS THE REFERENCE.

#### G BOARD IC VOLTAGE LIST

ALL VOLTAGES ARE IN V

1C651	1 13	5.4 3	26	4	89	5	GND		
(C652	1 22	.0 2	GND	3	120				

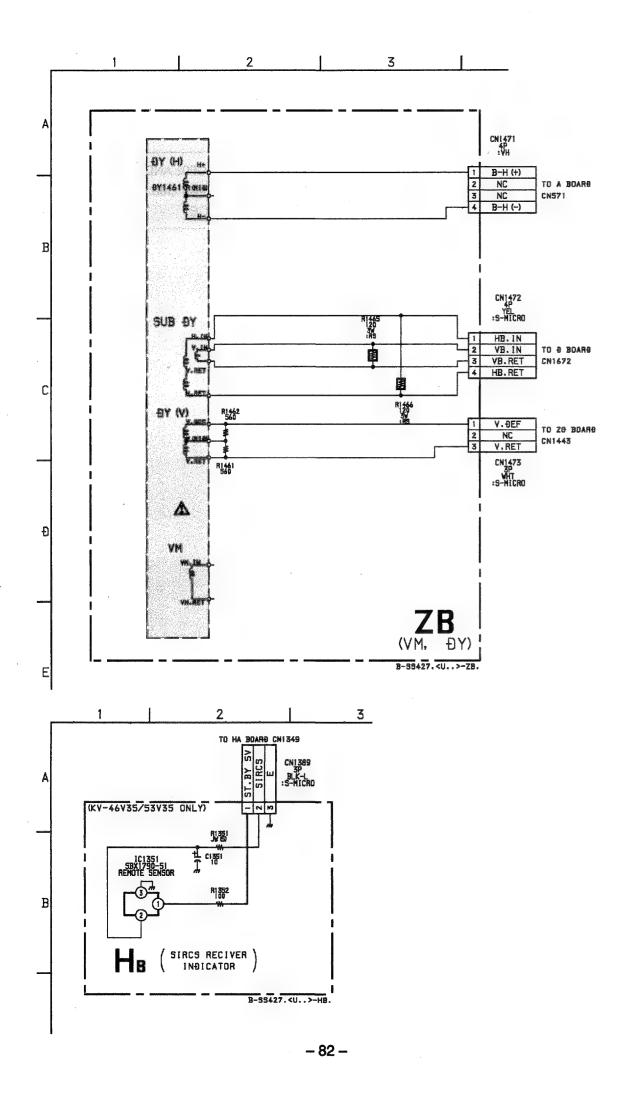
#### G BOARD TRANSISTOR VOLTAGE LIST

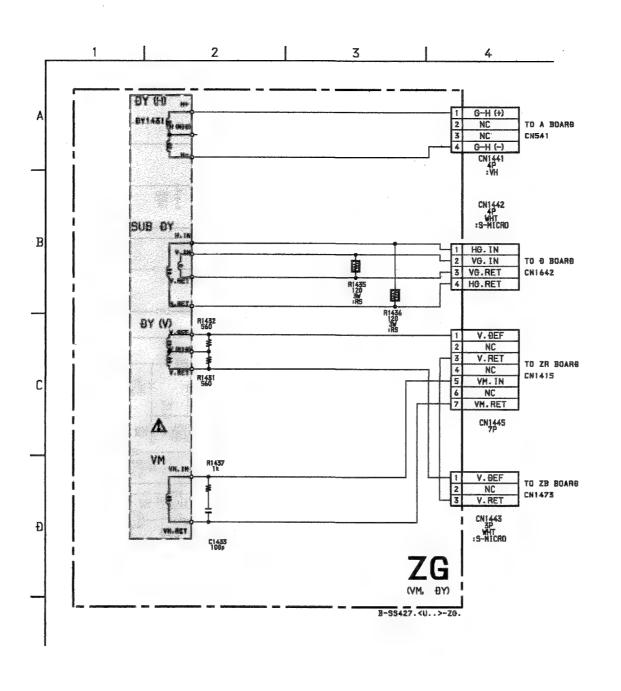
	E	С	В
Q601	GND	115	115
Q602	GND	115	115
Q651	135.5	0.2	135.4
Q652	13.0	GND	15.1
Q653	GND	15.1	0
Q654	15.7	- 2.0	15.7
Q655	GND	0.2	0.8
Q656	2.7	0.2	2.7
Q657	GND	2.7	0.2
Q658	15.0	8.2	14.8
Q659	15.0	15.3	14.6
Q660	15.0	15.3	14.6
Q661	11.0	0.2	11.5
Q662	12.0	12.1	11.4
Q663	15.0	15.3	14.6

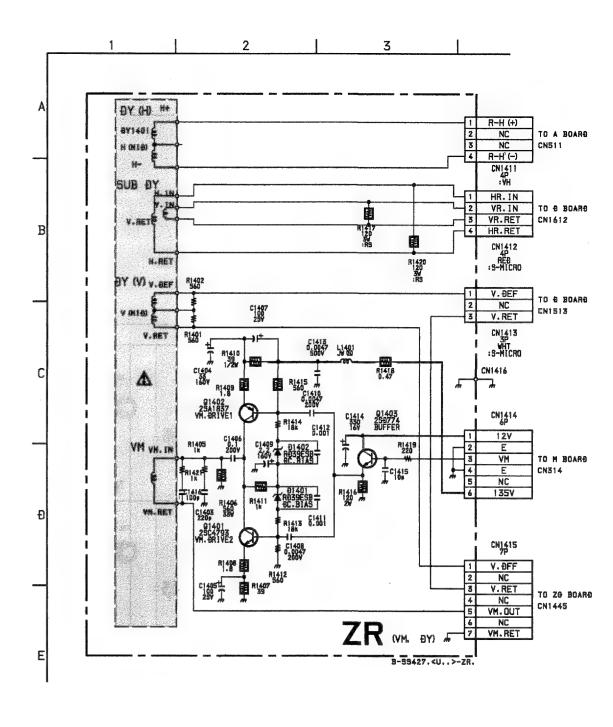
Schematic diagra

Schematic diagrams

HB , ZB , ZG , ZR boards →







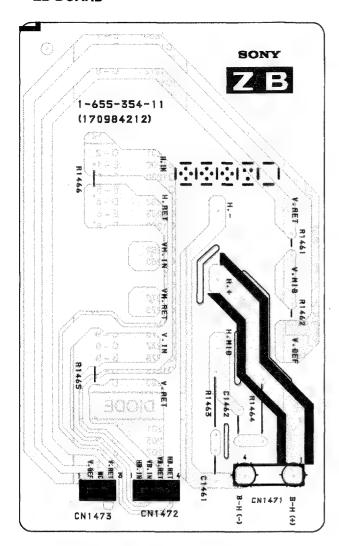
#### ZR BOARD TRANSISTOR VOLTAGE LIST

	ε	C	В
Q1401	0	-0.5	0
Q1402	-1.0	-0.5	-0.9
Q1403	4.8	12.0	5.4

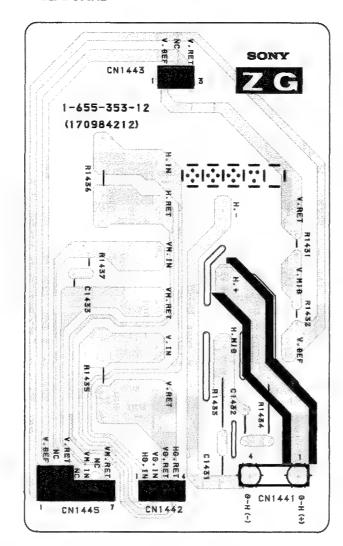
ALL VOLTAGES ARE IN V

ZB [VM, DY] ZG [VM, DY] ZR [VM, DY] HB [SIRCS RECEIVER,]

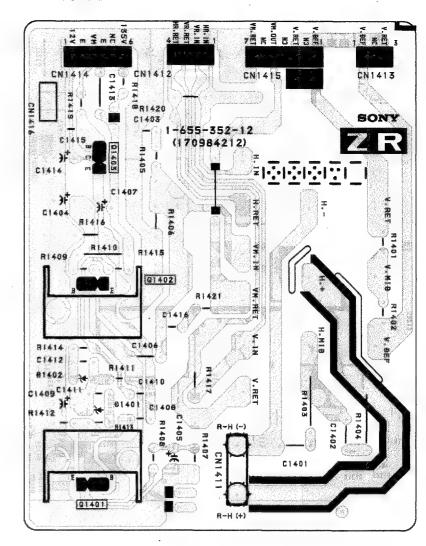
#### - ZB BOARD -



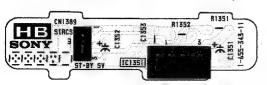
#### -ZG BOARD -

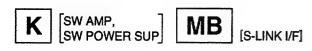


#### - ZR BOARD -

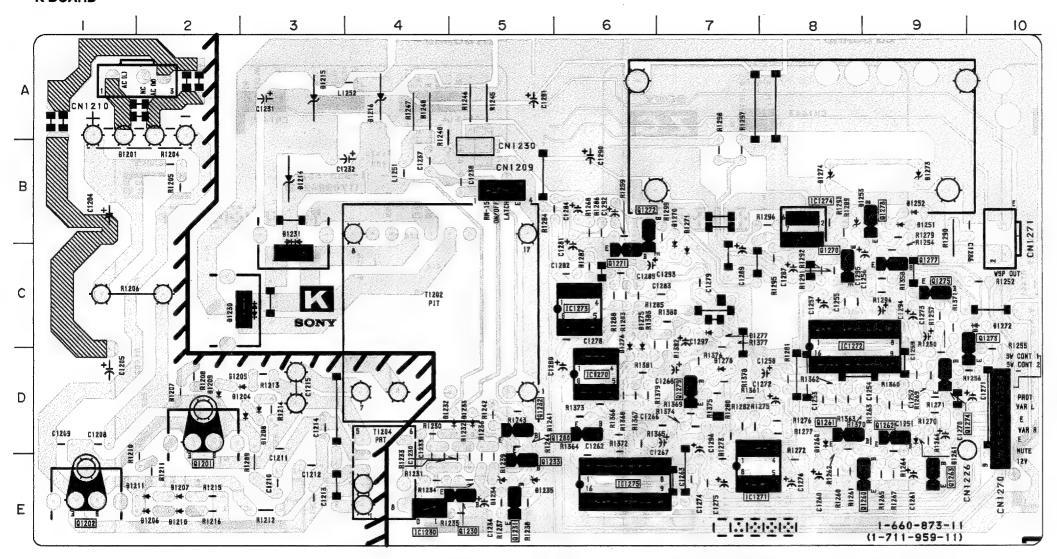


#### - HB BOARD - (KP-46V25/53V25 only)

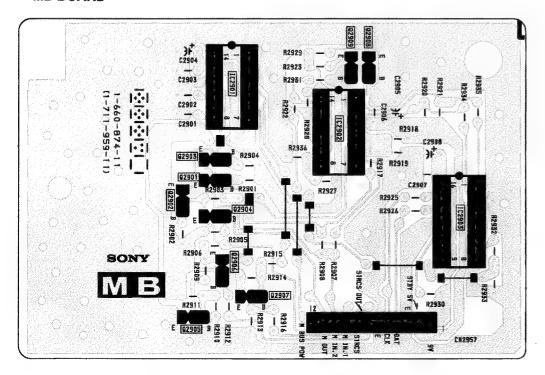




## - K BOARD -

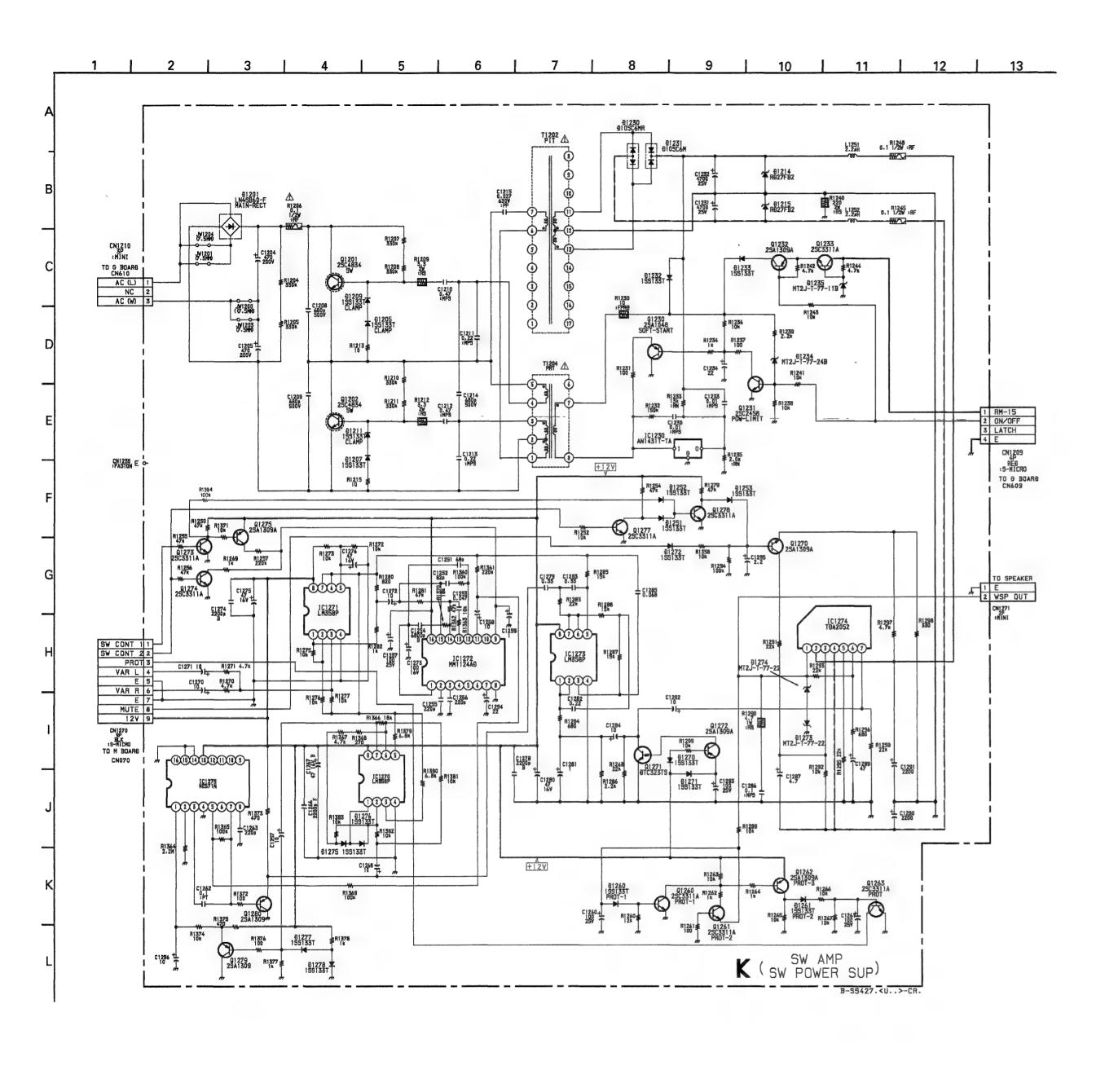


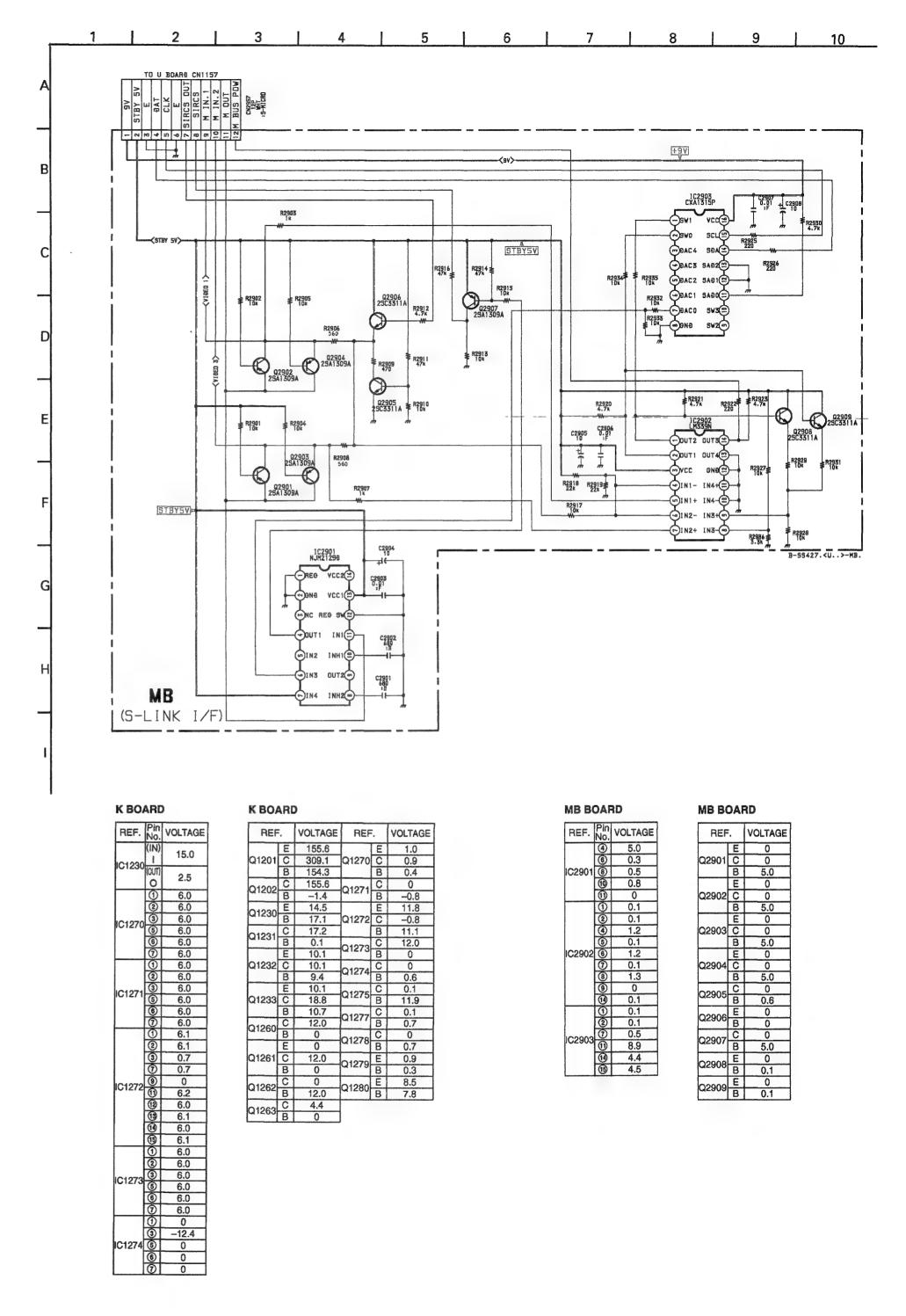
## - MB BOARD -



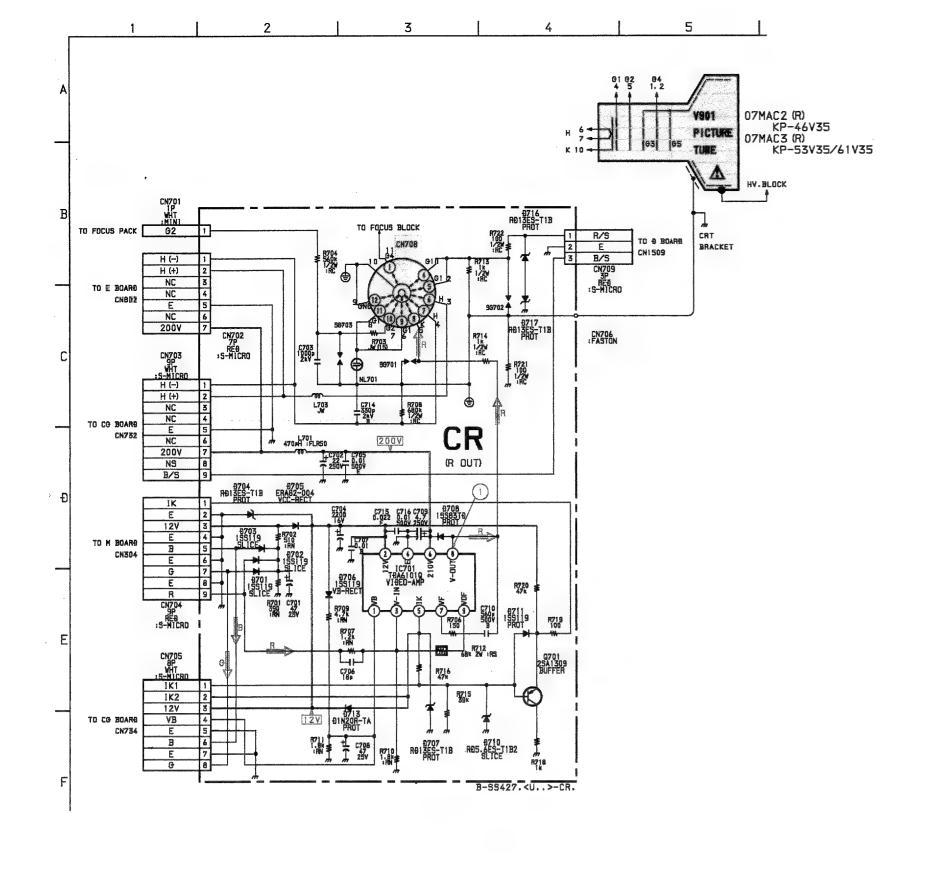
#### **K BOARD**

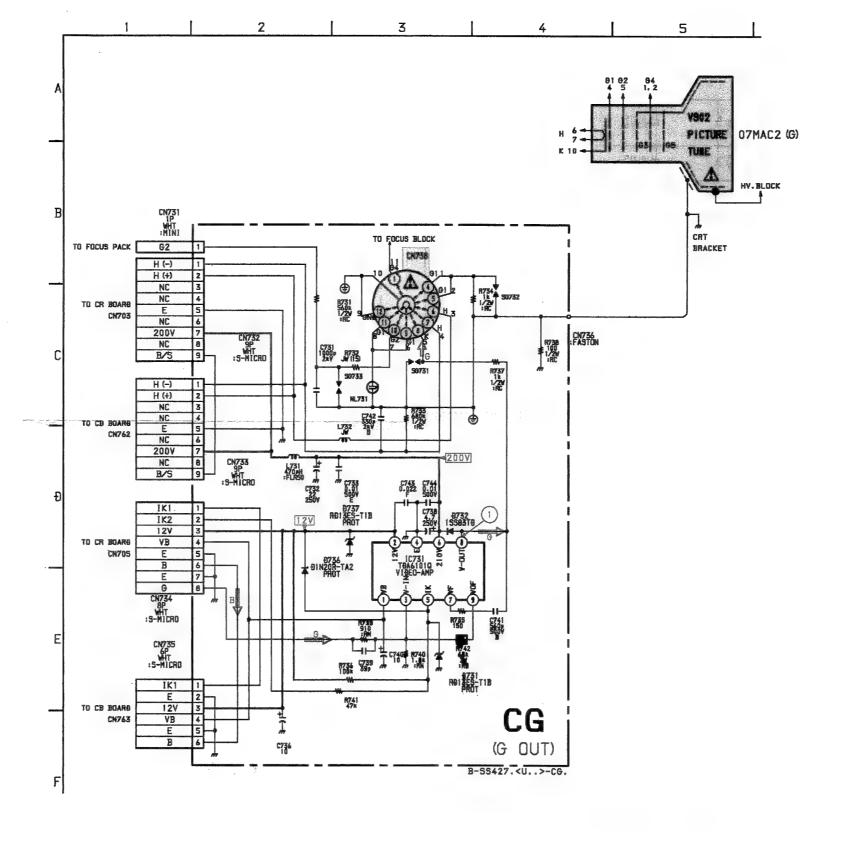
	IC
IC1230 IC1270 IC1271 IC1272 IC1273 IC1274 IC1275	E-4 D-6 E-7 C-8 C-6 B-8 E-6
TRAN	SISTOR
Q1201 Q1202 Q1230 Q1231 Q1232 Q1233 Q1260 Q1261 Q1262 Q1263 Q1270 Q1271 Q1272 Q1273 Q1274 Q1275 Q1277 Q1278 Q1279 Q1280	D = 2 - 2 - 1 - 5 - 5 - 5 - 6 - 7 - 7 - 8 - 9 - 9 - 9 - 9 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7
DI	ODE
D1201 D1205 D1207 D1209 D1211 D1214 D1215 D1230 D1231 D1232 D1233 D1234 D1235 D1251 D1260 D1261 D1270 D1271 D1272 D1273 D1275 D1276 D1277 D1278	B D E D E B A C C B D D E E B B D D B B C C C D D B B C C C D

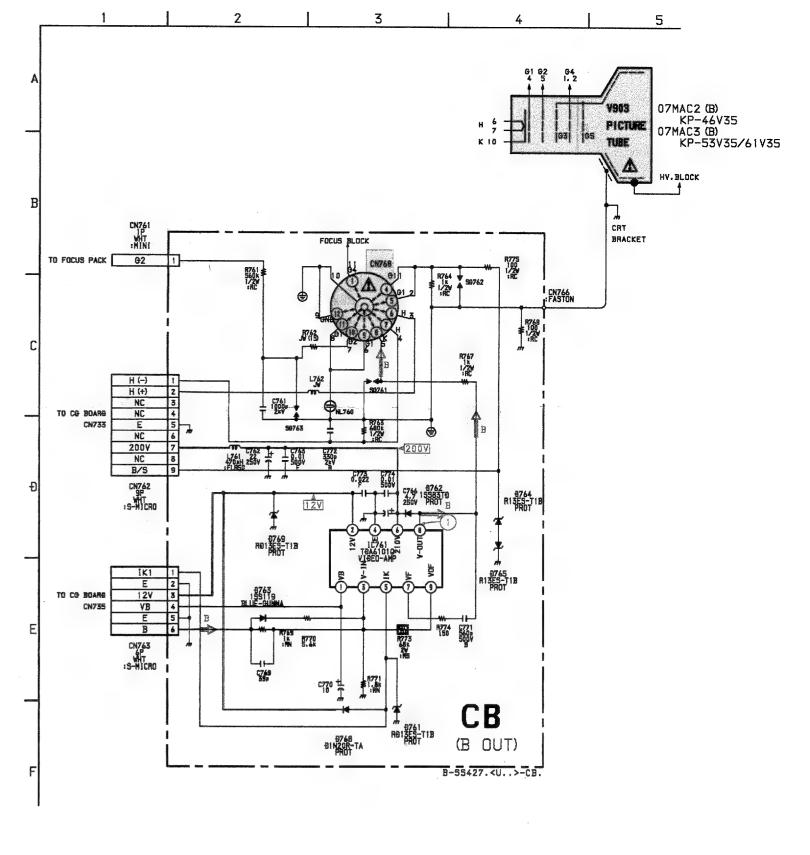


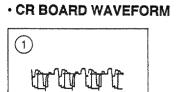


-99--91-

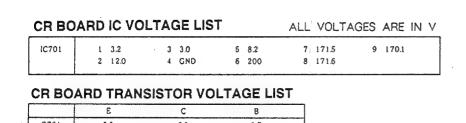




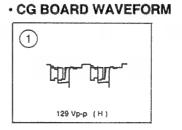




129 Vp-p (H)



## 



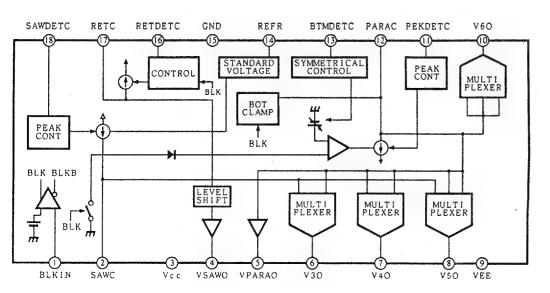
**-** 95 -

# · CB BOARD WAVEFORM

**- 96 -**

B BOA	ARD	IC VO	LTAG	E LIS	т			ALL	VOLT	TAGES	ARE IN V	PETO PETO PETO PET	
fC761	1	3.1	3	3.0		5 4.	.3	7	1472	9	1459		
	5	12.0	4	GND		6 2	00	8	149.7			130 Vp-p (H)	

### CR BOARD IC701 TDA6101Q



**-** 93 -

Schematic diagrams

(MB) boards

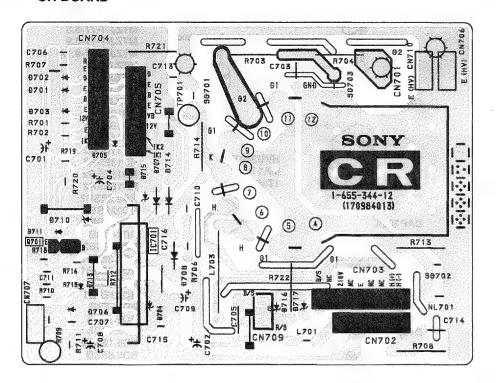
Schematic diagrams

CR, CG, CB boards →

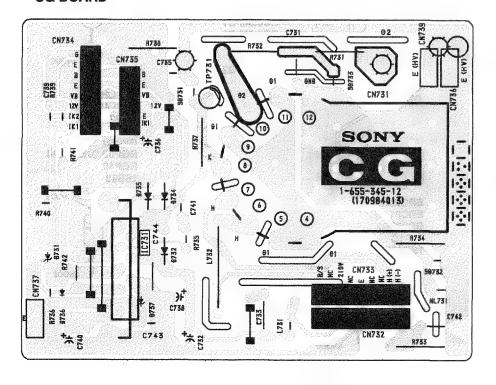
**- 94 -**



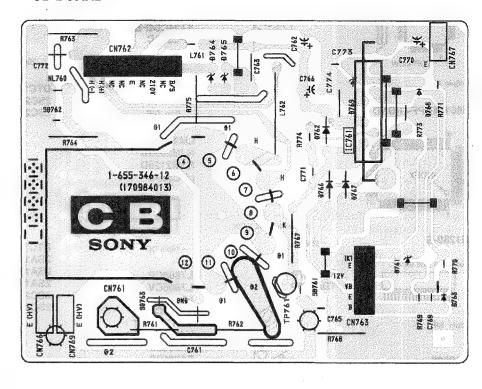
# - CR BOARD -



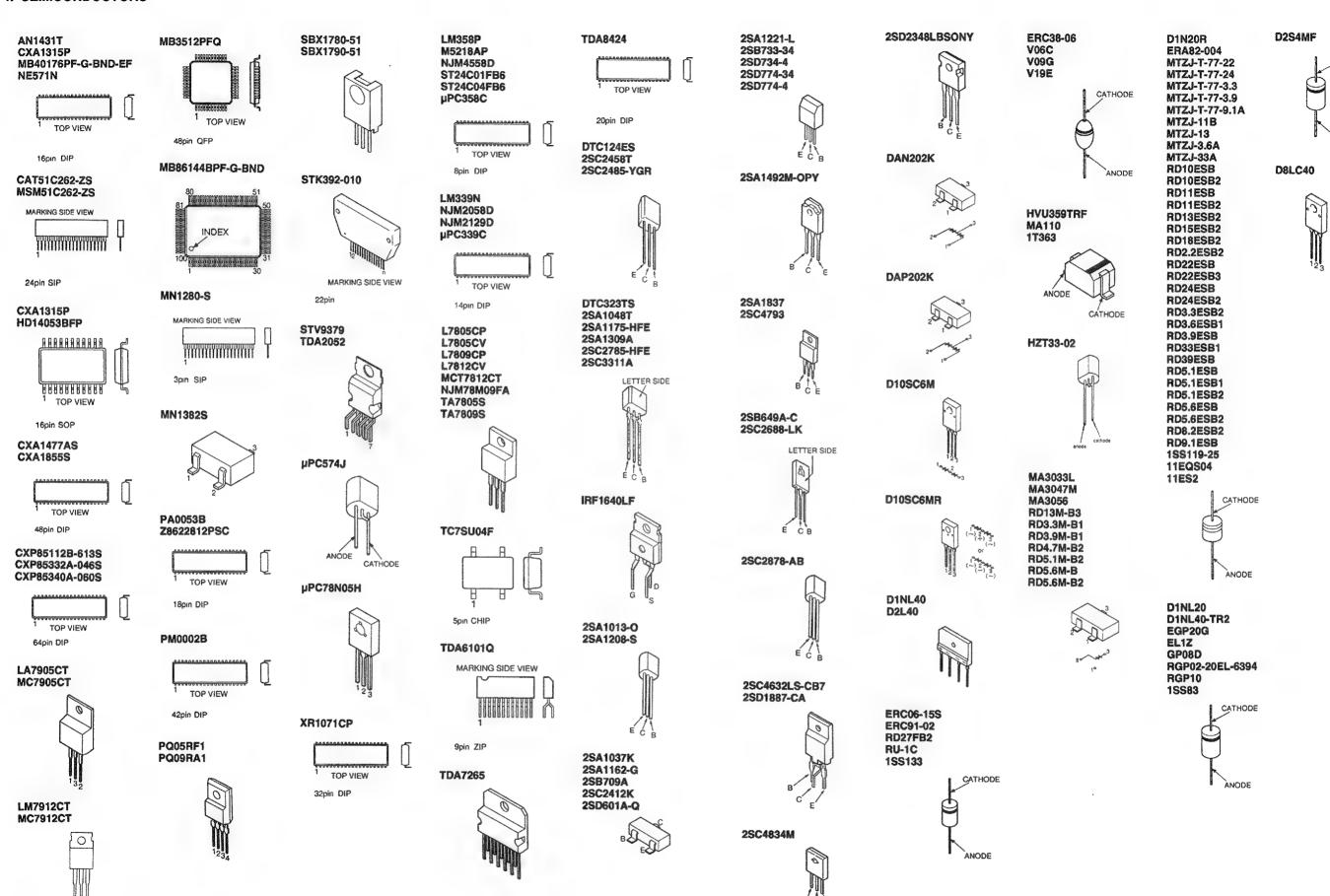
## - CG BOARD -



#### - CB BOARD -



#### 4-4. SEMICONDUCTORS



ANODE

# SECTION 5 EXPLODED VIEWS

#### NOTE:

 Items with no part number and no description are not stocked because they are seldom required for routine service.

5-1. COVER (KP-46V35/53V35)

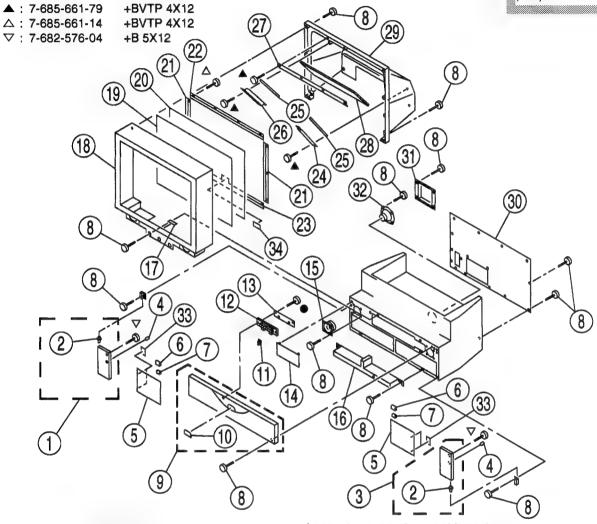
: 7-685-648-79

 The construction parts of an assembled part are indicated with a collation number in the remark column. shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

The componants identified by

+BVTP 3X12

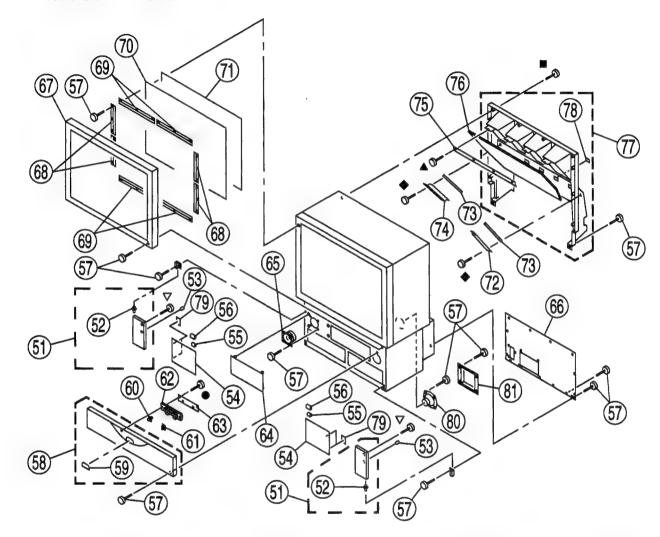
 Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items. Les composants identifies par une trame et une marque \(\Lambda\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. NO	PART NO.	DESCRIPTION	REMARK	REF. NO		DESCRIPTION	REMARK
1		DOOR (L) ASSY, RACK	2	20	4-036-469-01	PLATE (F), DIFFUSION (KP-53V35	
2	4-048-634-01	SHAFT			4-048-205-11	PLATE (F), DUFFUSION (KP-46V3	
3		DOOR (R) ASSY, RACK	2	21	*4-048-152-01	HOLDER (S), SCREEN (KP-46V35)	
5	4-036-901-01 4-048-790-01	SCREW GLASS (53), DOOR		İ	* 4-048-152-11	HOLDER (S), SCREEN (KP-53V35)	
3	4-040-790-01	OLASS (33), DOOR		22	* 4-048-159-01	HOLDER (L), SCREEN (KP-46V35)	
6	4-038-384-01	CATCHER, MAGNET			* 4-048-159-11	HOLDER (L), SCREEN (KP-53V35)	
7	4-038-385-01			23	* 4-048-159-21	HOLDER (L), SCREEN (KP-46V35)	
8		SCREW (4X20), TAPPING			* 4-048-159-31	HOLDER (L), SCREEN (KP-53V35)	
9		PANEL ASSY, CONTROL	10	24	* 4-049-096-01	HOLDER (RIGHT), SIDE	
10	4-048-000-01	DOOR, CONTROL					
				25	<b>* 4-049-098-01</b>	CUSHION	
11		GUIDE, LIGHT, LED		26	* 4-049-097-01	HOLDER (LEFT), SIDE	
12		BUTTON, MULTI		27	* 4-037-351-01	HOLDER, MIRROR	
		HA BOARD, COMPLETE		28	* 4-048-741-01	MIRROR, REFLECTION	
14	4-048-335-01	GRILLE, SPEAKER		29	* 4-048-639-01	COVER, MIRROR (KP-46V35)	
15	1-505-378-11	SPEAKER (10CM)			* 4 040 640 01	COVER MIDDOD (VD 52V25)	
16	4 049 247 01	PANEL, FRONT ORNAMENT		30	* 4-048-640-01 * 4-048-793-01	COVER, MIRROR (KP-53V35) PLATE (53), REAR (KP-53V35)	
		HB BOARD, COMPLETE		30	* 4-048-794-01	PLATE (35), REAR (KP-35 V35) PLATE (46), REAR (KP-46 V35)	
18		BEZNET ASSY (46V) (KP-46V35)		31	* 4-054-051-01		
10		BEZNET ASSY (53V) (KP-53V35)		32	1-505-377-11	SPEAKER (13CM)	
19	4-036-466-01	PLATE (L), DIFFUSION (KP-53V35	5)	33	4-039-009-02	CUSHION, GLASS	
			,				
	4-037-360-11	PLATE (L), DIFFUSION (KP-46V35	5)	34	3-551-305-21	CUSHION, PANEL	

## 5-2. COVER (KP-61V35)

● : 7-685-648-79 +BVTP 3X12 ■ : 7-685-663-79 +BVTP 4X16 ▲ : 7-685-661-79 +BVTP 4X12 ◆ : 7-685-666-79 +BVTP 4X30 ▽ : 7-682-576-04 +B 5X12



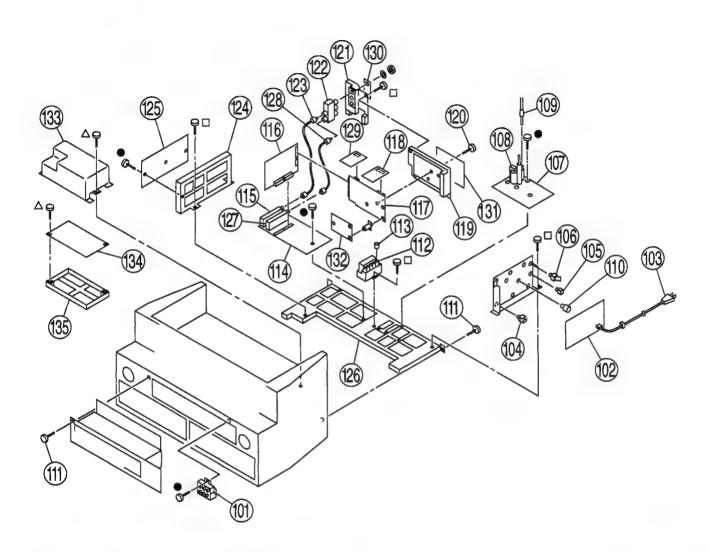
REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO		DESCRIPTION	REMARK
51 52 53 54	4-048-634-01 4-036-901-01 4-048-791-01	DOOR ASSY, RACK SHAFT SCREW GLASS (61), DOOR	52		X-4032-762-1 * 4-040-122-01 * 4-040-120-01 4-040-124-11	FRAME ASSY, SCREEN HOLDER (S), SCREEN HOLDER (L), SCREEN PLATE (L), DIFFUSION	
55 56 57 58 59 60	4-038-385-01 4-038-384-01 4-041-164-11 X-4032-612-1 4-048-000-01 4-047-999-01	SPACER  CATCHER, MAGNET SCREW (4X20), TAPPING PANEL ASSY, CONTROL DOOR, CONTROL FILTER. REMOTE	59	73 74	4-040-123-11 * 4-049-096-01 * 4-049-098-01 * 4-049-097-01 * 4-037-351-01	PLATE (F), DIFFUSION HOLDER (RIGHT), SIDE CUSHION HOLDER (LEFT), SIDE HOLDER, MIRROR	
61 62 63 64 65	4-047-998-01 4-048-001-01	GUIDE, LIGHT, LED BUTTON, MULTI HA BOARD, COMPLETE GRILLE, SPEAKER SPEAKER (10CM)		76 77 78 79 80 81	4-050-128-01 X-4033-048-1 4-048-150-01 4-039-009-02 1-505-377-11 * 4-054-051-01	CAP, HOLE	78
66 *	* 4-049-034-01	BOARD, REAR					

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque  $\triangle$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

#### 5-3. CHASSIS

: 7-685-648-79 +BVTP 3X12 □ : 7-685-663-71 +BVTP 4X16 +BVTP 4X12 △: 7-685-661-14



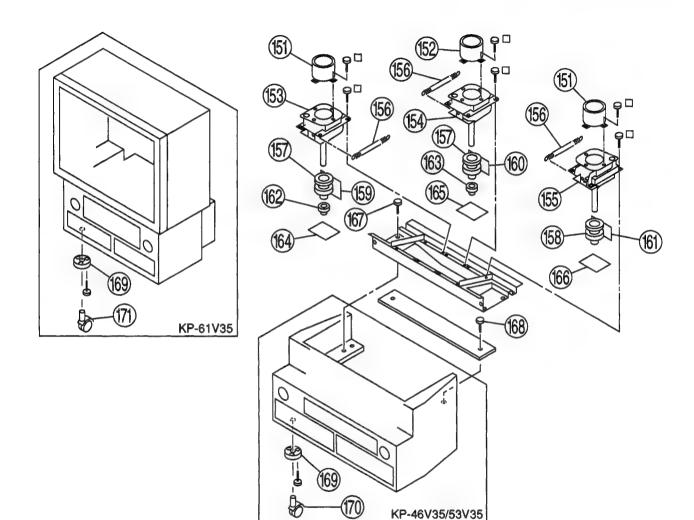
REF. NO	PART NO.	DESCRIPTION	REMARK	REF. NO	PART NO.	DESCRIPTION	REMARK
		RESISTOR ASSY (HIGH-	VOLTAGE)			P BOARD, COMPLETE	
		A G BOARD, COMPLETE CORD, POWER WITH N	OISE EN TERN	119	4-04/-951-41	TERMINAL BOARD (A)	
	G 1 107 G51 11	CORD, CONLING OF THE CORD	(7.0A/125V)	120	4-041-165-01	SCREW (3X12), TAPPING, +BV	
104	* 3-659-682-11	HOLDER, PC BOARD		121	4-047-952-11	TERMINAL BOARD (B)	
105	* 4-382-848-01	HOLDER, PCB		122	1-417-178-11	SELECTOR, ANTENNA (AS-2)	
				123	1-556-945-21	CABLE, P-P	
		HOLDER, PCB		124	* 4-047-950-01	BRACKET, D PC BOARD	
		A E BOARD, COMPLETE					
108	<b>▲ 1-453-189-11</b>	TRANSFORMER ASSY.				D BOARD, COMPLETE	
			(NX-2631//A4S)			BRACKET, MAIN PC BOARD	
	<b>≜ 1-900-211-34</b>	LEAD ASSY, HV				TUNER, BTF-LA401	
110	* 3-687-542-41	SPACER, PC BOARD SP.	ACE		*1-557-056-41		
				129	8-741-797-01	FILTER, DIGITAL COM SBX179	7-01
111		SCREW (4X20), TAPPING					
		BLOCK ASSY, HIGH-YO	LTAGE	130		LABEL (B), TERMINAL	
113	4-373-137-01			131		LABEL (A), TERMINAL	
114		A A BOARD, COMPLETE (				MB BOARD, COMPLETE	
	* A-1297-795-	A A BOARD, COMPLETE (	KP-61V35)		* 4-053-180-01		
1000040404040000000	04000400044004404404404					K BOARD, COMPLETE	
,		TUNER, BTF-WA402		135	* 4-053-181-01	HOLDER, PCB	
		M BOARD, COMPLETE					
117	* A-1373-559-	A U BOARD, COMPLETE	·				

The componants identified by shading and mark ∆ are critical for safety.

cal for safety. Replace only with part number specified. Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

#### 5-4. PICTURE TUBE

☐ : 7-685-663-71 +BVTP 4X16



REF. N	O. PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
151	4-034-057-01 4-040-131-01	LENS (LINNIT) (KP-46V3 LENS (LINNIT POINT 6)				ZG BOARD, COMPLETE ZB BOARD, COMPLETE	
152	4-034-057-11	LENS (LINNIT) (KP-46V3		101	11-1350-451-11	25 BOTALD, COMI ELIE	
2000021222220000	4-040-131-11				1-452-790-21		
153	A 8-736-077-15	PICTURE TUBE 07MAC2	(R) (KP-46V35)		1-452-790-11	NECK ASSY CR BOARD, COMPLETE	
	A 8.736_077.25	PICTURE TUBE 07MAC3	(B) (KP.53V35/613/35)			CG BOARD, COMPLETE	
154		PICTURE TUBE 07MAC2				CB BOARD, COMPLETE	
155		PICTURE TUBE 07MAC2				· ·	
	₫ 8-736-076-25	PICTURE TUBE 07MAC3	(B) (KP-53V35/61V35)		4-052-894-01	SCREW (4X20), HEAD TAI	
156	4-048-142-01	SPRING, TENSION		168	4-378-522-11	SCREW, TAPPING, HEXA	GON HEAD
				169	4-030-850-01	SOCKET, CASTER	
157	▲ 8-451-463-11	DEFLECTION YOKE Y82	9PA2N (R), (G)	170	4-049-006-01	CASTER (KP-46V35/53V35	)
158	A 8-451-463-21	DEFLECTION YOKE Y82	9PA2N2 (B)	171	4-040-508-01	CASTER (KP-61V35)	
159	* A-1390-487-A	ZR BOARD, COMPLETE				·	

# SECTION 6 ELECTRICAL PARTS LIST



#### NOTE:

Les composants identifies par une trame et une marque  $\Lambda$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark extstyle 
- The components identified by 
   in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

- CAPACITORS PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

#### RESISTORS

- · All resistors are in ohms
- F: nonflammable

						ble	onflammal	• F : no		
REMAR		DESCRIPTION	PART NO.	REF. NO.	REMARK			DESCRIPTION	PART NO.	REF. NO.
50V	5%	CERAMIC CHIP 27PF	1-163-103-00	C3252				P BOARD, CON	* A-1195-062-A	
50V 50V 50V 50V 50V	5% 5% 5% 10% 5%	CERAMIC CHIP 22PF CERAMIC CHIP 0.001MF CERAMIC CHIP 22PF CERAMIC CHIP 0.01MF CERAMIC CHIP 100PF	1-163-141-00 1-163-101-00 1-164-232-11	C3253 C3254 C3255 C3256 C3257				<capacitor></capacitor>		
50V 50V 50V 50V 50V	5% 5% 5% 5%	CERAMIC CHIP 68PF CERAMIC CHIP 56PF CERAMIC CHIP 120PF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF	1-163-111-00 1-163-119-00 1-163-141-00	C3258 C3259 C3260 C3261 C3263	16V 25V 50V 50V 50V	20% 10% 20% 20% 20%	47MF 0.1MF 10MF 10MF 10MF	CERAMIC CHIP ELECT ELECT	1-126-967-11 1-164-004-11 1-126-964-11 1-126-964-11 1-126-964-11	C3201 C3203 C3204 C3205 C3206
50V 50V 50V 50V 50V	5% 5% 5% 5%	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.001MF	1-165-319-11 1-163-141-00 1-163-141-00 1-163-141-00	C3264 C3265 C3266 C3267 C3268	50V 50V 50V 16V 50V	5% 5% 20% 20% 20%		ELECT		C3207 C3208 C3209 C3210 C3212
50V 50V 50V 50V 50V	5% 5%	CERAMIC CHIP 0.001MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 47PF	1-163-141-00 1-165-319-11 1-165-319-11 1-165-319-11	C3269 C3270 C3271 C3272 C3273	16V 16V 16V 25V 16V		1MF 1MF 0.47MF	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1-164-346-11 1-164-346-11 1-164-005-11	C3213 C3214 C3215 C3216 C3217
50V 50V 50V 50V 50V	5% 5% 5% 5%	CERAMIC CHIP 22PF CERAMIC CHIP 22PF CERAMIC CHIP 56PF CERAMIC CHIP 22PF CERAMIC CHIP 22PF	1-163-101-00 1-163-111-00 1-163-101-00	C3274 C3275 C3276 C3277 C3278	16V 16V 16V 16V 25V	20%	470MF 1MF 1MF	CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1-126-935-11 1-164-346-11 1-164-346-11	C3218 C3219 C3220 C3221 C3222
50V 50V 16V	5% 20%	CERAMIC CHIP 0.001MF	1-163-141-00 1-126-964-11	C3279 C3280 C3282	25V 25V 25V 25V 16V		0.22MF 0.22MF 0.47MF	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1-164-222-11 1-164-222-11 1-164-005-11	C3223 C3224 C3225 C3226 C3227
		<connector></connector>		8 8 8	50V	5% 5%		CERAMIC CHIP		C3228
) 18P	BOAR	CONNECTOR, BOARD TO	1-573-297-21	CN150	50V 50V	5% 5%	0.001MF 220PF	CERAMIC CHIP CERAMIC CHIP	1-163-141-00 1-163-125-00	C3230 C3231
		<diode></diode>		4						
		DIODE HVU359TRF DIODE MA110 DIODE RD10ESB2 DIODE RD10ESB2	8-719-404-46 8-719-110-17	D3202 D3203 D3208 D3209	50V 50V 50V 50V 50V	10% 10% 10% 10% 10%	0.01MF 0.01MF 0.01MF	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1-164-232-11 1-164-232-11 1-164-232-11	C3233 C3234 C3235 C3236 C3237
		<ic></ic>			50V 50V 50V	5% 5% 5%	0.001MF	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1-163-141-00	C3238 C3239 C3240
		IC MSM51C262-ZS IC MB86144BPF-G-BND IC MB40176PF-G-BND-FF	8-759-093-29	IC3200 IC3201 IC3202	50V 50V	5% 10%	27PF	CERAMIC CHIP CERAMIC CHIP	1-163-103-00	C3241 C3242
		IC MB40176PF-G-BND-EF IC MB3512PFQ	8-759-093-28 8-759-093-25	IC3203 IC3204	50V 50V 50V	5% 5% 10%	2 68PF 2 0.01MF	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1-163-113-00 1-164-232-11	C3243 C3244 C3245
		IC IC/GOUTA	0-109-2 <del>4</del> 0-17	103203	50V			CERAMIC CHIP		C3247
		<coil> INDUCTOR 10UH</coil>	1-410-470-11 1-408-424-00	L3201 L3202	50V 50V 50V 50V	5% 5% 5% 10%	P 100PF P 68PF	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1-163-117-00	C3248 C3249 C3250 C3251
	5% 20% BOAR	CERAMIC CHIP 0.001MF ELECT 10MF CERAMIC CHIP 1MF <connector> CONNECTOR, BOARD TO  <diode> DIODE HVU359TRF DIODE MA110 DIODE RD10ESB2 DIODE RD10ESB2  <ic> IC MSM51C262-ZS IC MB86144BPF-G-BND IC MB40176PF-G-BND-EF IC MB40176PF-G-BND-EF IC MB3512PFQ IC TC7SU04F  <coil> INDUCTOR 10UH</coil></ic></diode></connector>	1-163-141-00 1-126-964-11 1-164-346-11 1-573-297-21 8-719-031-68 8-719-404-46 8-719-110-17 8-719-110-17 8-759-288-13 8-759-093-29 8-759-093-28 8-759-093-28 8-759-093-25 8-759-243-19	C3279 C3280 C3282  CN150  D3202 D3203 D3208 D3209  IC3200 IC3201 IC3202 IC3203 IC3204 IC3205	25V 25V 25V 16V 50V 50V 50V 50V 50V 50V 50V 50V 50V 50	5% 5% 5% 10% 10% 10% 5% 5% 5% 10% 5% 5% 5% 5% 5%	2 0.22MF 2 0.22MF 3 0.47MF 4 100PF 4 0.001MF 5 0.001MF 6 0.01MF 7 0.01MF 7 0.01MF 7 0.01MF 7 0.01MF 8 0.01MF 9 0.01MF	CERAMIC CHIP	1-164-222-11 1-164-222-11 1-164-005-11 1-164-036-11 1-163-117-00 1-163-93-00 1-163-141-00 1-163-117-00 1-164-232-11 1-164-232-11 1-164-232-11 1-164-232-11 1-164-232-11 1-164-232-11 1-163-101-00	C3224 C3225 C3226 C3227 C3228 C3230 C3231 C3232 C3233 C3234 C3235 C3236 C3237 C3238 C3239 C3240 C3241 C3242 C3243 C3244 C3245 C3244 C3245 C3244 C3245 C3246 C3247

# SECTION 6 ELECTRICAL PARTS LIST



#### NOTE:

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number specified.

- The components identified by 
   in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

- CAPACITORS PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

#### RESISTORS

- · All resistors are in ohms
- F : nonflammable

		* F . II	omiammar	ne.							
REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1195-062-A	P BOARD, CO!				C3252	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C2201	1 124 047 11	<capacitor></capacitor>		200	1611	C3253 C3254 C3255 C3256 C3257	1-163-141-00 1-163-101-00 1-164-232-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.001MF 22PF 0.01MF	5% 5% 5% 10% 5%	50V 50V 50V 50V 50V
C3201 C3203 C3204 C3205 C3206	1-126-967-11 1-164-004-11 1-126-964-11 1-126-964-11 1-126-964-11	CERAMIC CHIP ELECT ELECT	47MF 0.1MF 10MF 10MF 10MF	20% 10% 20% 20% 20%	16V 25V 50V 50V 50V	C3258 C3259 C3260 C3261 C3263	1-163-111-00 1-163-119-00 1-163-141-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	56PF 120PF 0.001MF	5% 5% 5% 5%	50V 50V 50V 50V 50V
C3207 C3208 C3209 C3210 C3212		ELECT		5% 5% 20% 20% 20%	50V 50V 50V 16V 50V	C3264 C3265 C3266 C3267 C3268	1-165-319-11 1-163-141-00 1-163-141-00 1-163-141-00	CERAMIC CHIP ( CERAMI	0.1MF 0.001MF 0.001MF 0.001MF	5% 5% 5% 5%	50V 50V 50V 50V 50V
C3213 C3214 C3215 C3216 C3217	1-164-346-11 1-164-346-11 1-164-005-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1MF 1MF 0.47MF		16V 16V 16V 25V 16V	C3269 C3270 C3271 C3272 C3273	1-163-141-00 1-165-319-11 1-165-319-11 1-165-319-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.001MF 0.1MF 0.1MF 0.1MF	5% 5%	50V 50V 50V 50V 50V
C3218 C3219 C3220 C3221 C3222	1-126-935-11 1-164-346-11 1-164-346-11	CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	470MF 1MF 1MF	20%	16V 16V 16V 16V 25V	C3274 C3275 C3276 C3277 C3278	1-163-101-00 1-163-101-00 1-163-111-00 1-163-101-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	22PF 22PF 56PF 22PF	5% 5% 5% 5%	50V 50V 50V 50V 50V
C3223 C3224 C3225 C3226 C3227	1-164-222-11 1-164-222-11 1-164-005-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.22MF 0.22MF 0.47MF		25V 25V 25V 25V 25V 16V	C3279 C3280 C3282	1-163-141-00 1-126-964-11	CERAMIC CHIP	0.001MF 10MF	5% 20%	50V 50V 16V
C3228 C3229		CERAMIC CHIP CERAMIC CHIP		5% 5%	50V 50V			<connector></connector>			
C3230 C3231 C3232	1-163-141-00 1-163-125-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.001MF 220PF	5% 5% 5%	50V 50V 50V	CN150	1-573-297-21	CONNECTOR, BO	DARD TO	BOAR	D 18P
C3233		CERAMIC CHIP		10%	50V			<diode></diode>			
C3234 C3235 C3236 C3237	1-164-232-11 1-164-232-11 1-164-232-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF 0.01MF 0.01MF	10% 10% 10% 10%	50V 50V 50V 50V	D3202 D3203 D3208 D3209	8-719-404-46 8-719-110-17	DIODE HVU359T DIODE MA110 DIODE RD10ESB DIODE RD10ESB	2		
C3238 C3239 C3240	1-163-141-00 1-163-101-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.001MF 22PF	5% 5% 5%	50V 50V 50V			<ic></ic>			
C3241 C3242		CERAMIC CHIP CERAMIC CHIP		5% 10%	50V 50V	IC3200 IC3201 IC3202	8-759-093-29	IC MSM51C262-Z IC MB86144BPF-G IC MB40176PF-G	G-BND		
C3243 C3244 C3245	1-163-113-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	68PF	5% 5% 10%	50V 50V 50V	IC3203 IC3204	8-759-093-28	IC MB40176PF-G- IC MB3512PFQ			
C3246 C3247	1-164-232-11	CERAMIC CHIP CERAMIC CHIP	0.01MF	10%	50V 50V	IC3205	8-759-243-19	IC TC7SU04F			
C3248 C3249 C3250 C3251	1-163-117-00 1-163-113-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	100PF 68PF	5% 5% 5% 10%	50V 50V 50V 50V	L3201 L3202		<coil> INDUCTOR 10UH INDUCTOR 180U</coil>			
	1 10. 202 11	January Cilli	J. J	1070	10		1 TOO TET-UU	DOCTOR 1000			



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C243 C244 C245	1-137-399-11 1-104-665-11 1-137-399-11	ELECT	0.1MF 100MF 0.1MF	5% 20% 5%	50V 25V 50V	CN222 CN223 CN224 CN225	*1-564-507-11 *1-564-507-11	CONNECTOR, BOARD TO BOA PLUG, CONNECTOR 4P PLUG, CONNECTOR 4P PLUG, CONNECTOR 10P	RD 20P
C249 C262 C263 C264 C265	1-137-399-11 1-104-664-11 1-104-665-11 1-104-665-11 1-104-665-11	ELECT ELECT ELECT	0.1MF 47MF 100MF 100MF 100MF	5% 20% 20% 20% 20%	50V 25V 25V 25V 25V	CN511 CN527 CN528 CN541 CN571	*1-580-689-11 *1-573-963-11 1-695-915-11 *1-580-689-11	PIN, CONNECTOR (PC BOARD PIN, CONNECTOR (PC BOARD TAB (CONTACT) PIN, CONNECTOR (PC BOARD PIN, CONNECTOR (PC BOARD	) 3P ) 4P
C266 C267 C270 C271 C272	1-104-665-11 1-104-664-11 1-102-978-00 1-102-123-00 1-102-074-00	ELECT CERAMIC CERAMIC	100MF 47MF 220PF 0.0033MF 0.001MF	20% 20% 5% 10% 10%	25V 25V 50V 50V 50V			PLUG, CONNECTOR 3P <diode></diode>	, 12
C273 C274 C275 C276 C277	1-126-962-11 1-126-964-11 1-124-902-00 1-102-125-00 1-126-963-11	ELECT ELECT CERAMIC	3.3MF 10MF 0.47MF 0.0047MF 4.7MF	20% 20% 20% 10% 20%	50V 50V 50V 50V 50V	D201 D202 D220 D221 D230	8-719-110-17 8-719-991-33 8-719-991-33	DIODE RD10ESB2 DIODE RD10ESB2 DIODE 1SS133T-77 DIODE 1SS133T-77 DIODE 1SS133T-77	
C278 C279 C280 C281 C282	1-124-925-11 1-126-963-11 1-126-963-11 1-102-123-00 1-102-125-00	ELECT ELECT CERAMIC	2.2MF 4.7MF 4.7MF 0.0033MF 0.0047MF		50V 50V 50V 50V 50V	D231 D232 D233 D234 D235	8-719-991-33 8-719-991-33 8-719-991-33	DIODE 1SS133T-77 DIODE 1SS133T-77 DIODE 1SS133T-77 DIODE 1SS133T-77 DIODE 1SS133T-77	
C283 C284 C285 C286 C287	1-126-963-11 1-124-925-11 1-126-963-11 1-126-963-11 1-102-074-00	ELECT ELECT ELECT	4.7MF 2.2MF 4.7MF 4.7MF 0.001MF	20% 20% 20% 20% 10%	50V 50V 50V 50V 50V	D262 D263 D264 D301 D302	8-719-991-33 8-719-991-33 8-719-924-11	DIODE 1SS133T-77 DIODE 1SS133T-77 DIODE 1SS133T-77 DIODE MTZJ-T-77-22 DIODE MTZJ-T-77-22	
C288 C289 C290 C291 C292	1-104-665-11 1-124-903-11 1-102-978-00 1-124-902-00 1-104-664-11	ELECT CERAMIC ELECT	100MF 1MF 220PF 0.47MF 47MF	20% 20% 5% 20% 20%	25V 50V 50V 50V 25V	D303 D304 D501 D502 D504	8-719-924-11 8-719-991-33 8-719-983-14	DIODE MTZJ-T-77-22 DIODE MTZJ-T-77-22 DIODE 1SS133T-77 DIODE MTZJ-T-77-3.9 DIODE 1SS133T-77	
C501 C502 C503 C504 C505	1-124-902-00 1-104-664-11 1-137-370-11 1-102-973-00 1-137-372-11	ELECT FILM CERAMIC	0.47MF 47MF 0.01MF 100PF 0.022MF	20% 20% 5% 5% 5%	50V 25V 50V 50V 50V	D505 D506 D507 D509 D510	8-719-300-80 8-719-018-82 8-719-900-95	DIODE 1SS133T-77 DIODE RU-1C DIODE RGP02-20EL-6394 DIODE V09G (KP-46V35/53V35 DIODE V09G (KP-46V35/53V35	
C506 C507 C508 C509 C510	1-123-024-21 1-107-368-11 1-107-638-11 1-107-368-11 1-102-030-00	FILM ELECT FILM	33MF 0.047MF 33MF 0.047MF 330PF	10% 20% 10% 10%	160V 200V 160V 200V 500V	D511 D1001 D1002	8-719-982-24	DIODE 1SS133T-77 DIODE MTZJ-33A DIODE MTZJ-33A	
C511 C512 C513 C514 C515	1-137-414-11 1-162-115-00 1-136-598-11 1-136-613-11 1-162-114-00	CERAMIC FILM FILM	0.0047MF 330PF 3MF 0.0068MF 0.0047MF	10% 5% 3%	100V 2KV 200V 2KV 2KV	IC201 IC202 IC230 IC262	8-759-135-80 8-759-090-21 8-759-190-89 8-759-054-14	IC TDA8424 IC TDA7265 IC PQ09RA1	
C516 C517 C518 C519 C1001	1-107-719-11 1-126-971-11 1-126-971-11 1-124-903-11 1-126-963-11	ELECT ELECT ELECT	220MF 470MF 470MF 1MF 4.7MF	20% 20% 20% 20% 20%	50V 50V 50V 50V 50V	IC263 IC264 IC270 IC271 IC1001	8-759-253-06 8-752-057-18	IC PQ03RF1 IC MCT7812CT IC XR1071CP IC CXA1315P IC HD14053BFP	
C1002 C1003	1-126-964-11 1-126-965-11	ELECT	10MF 22MF	20% 20%	50V 50V			<coil></coil>	
C1004 C1005 C1006	1-126-952-11 1-104-665-11 1-101-004-00	ELECT	1000MF 100MF 0.01MF	20% 20%	16V 25V 50V	L501 L503		COIL, CHOKE 15mH COIL, HORIZONTAL LINEARIT	Y(HLC)
C1007 C1008	1-126-935-11 1-101-004-00	CERAMIC	470MF 0.01MF	20%	16V 50V	L1001 L1002 L1003	1-408-408-00	INDUCTOR 8.2UH INDUCTOR 8.2UH INDUCTOR 100UH	
C1009 C1010 C1011	1-126-964-11 1-126-964-11 1-102-121-00	ELECT	10MF 10MF 0.0022MF	20% 20% 10%	50V 50V 50V	L1004 L1006	1-408-408-00	INDUCTOR 8.2UH INDUCTOR 8.2UH	
C1012	1-102-121-00	CERAMIC	0.0022MF	10%	50V	L1007	1-408-408-00	INDUCTOR 8.2UH	
		<connector:< td=""><td>•</td><td></td><td></td><td>11 0 0 0</td><td></td><td><transistor></transistor></td><td></td></connector:<>	•			11 0 0 0		<transistor></transistor>	
CN221	1-573-298-21	CONNECTOR, I		BOAR	D 20P	Q220 Q221		TRANSISTOR DTC323TS TRANSISTOR 2SA1175-HFE	



Q222 Q223 Q230 Q231 Q232	PART NO.	DESCRIPTION			REMARK :	REF. NO.	PART NO.	DESCRIPTION		R	EMARK	
Q223 Q230 Q231 Q232 Q233 Q234 Q235 Q236 Q237 Q238 Q270 Q271 Q501 Q502 Q503 Q504 Q505 Q506 Q507 Q508 Q509 Q510 Q511 Q1001 Q1002 Q1003 Q1004 R207 R208 R209 R210	0.500.005.14					101.110.	171111 110.					
Q232 Q233 Q234 Q235 Q236 Q237 Q238 Q270 Q271 Q501 Q502 Q503 Q504 Q505 Q506 Q507 Q508 Q509 Q510 Q511 Q1001 Q1002 Q1003 Q1004 R207 R208 R209 R210	8-729-119-76	TRANSISTOR TRANSISTOR TRANSISTOR	2SA1175-HF			R252 R253	1-249-417-11 1-249-417-11	CARBON	1K 1K	5% 5%	1/4W 1/4W	
Q237 Q238 Q270 Q271 Q501 Q502 Q503 Q504 Q505 Q507 Q508 Q509 Q510 Q511 Q1001 Q1002 Q1003 Q1004 R207 R208 R209 R210	8-729-119-78 8-729-119-78 8-729-119-78	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	2SC2785-HF 2SC2785-HF 2SC2785-HF	E E		R254 R255 R256 R257 R258	1-249-417-11 1-249-429-11 1-249-436-11 1-249-429-11 1-249-429-11	CARBON CARBON CARBON	1 K 10 K 39 K 10 K 10 K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q501 Q502 Q503 Q504 Q505 Q506 Q507 Q508 Q509 Q510 Q511 Q1001 Q1002 Q1003 Q1004 R207 R208 R209 R210	8-729-119-78 8-729-119-78 8-729-119-76	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	2SC2785-HF 2SC2785-HF 2SA1175-HF	TE FE		R259 R260 R270 R271 R272		METAL CARBON	4.7 4.7 6.2K 10K 150K	5% 5% 1% 5% 5%	1W 1W 1/4W 1/4W 1/4W	F F
Q506 Q507 Q508 Q509 Q510 Q511 Q1001 Q1002 Q1003 Q1004 R207 R207 R208 R209 R210	8-729-119-76 8-729-119-76 8-729-119-78 8-729-119-78	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	2SA1175-HF 2SA1175-HF 2SC2785-HF 2SC2785-HF	FE FE FE		R273 R274 R276 R277 R279	1-249-429-11 1-249-441-11 1-249-425-11 1-249-429-11 1-249-441-11	CARBON CARBON CARBON	10K 100K 4.7K 10K 100K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q511 Q1001 Q1002 Q1003 Q1004 R207 R208 R209 R210	8-729-201-32 8-729-304-92 8-729-201-32 8-729-010-98	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	2SA1013-O 2SB649A-C 2SA1013-O 2SA1492M-	OPY		R280 R281 R282 R283 R501	1-249-417-11 1-249-429-11 1-215-440-00 1-249-429-11 1-249-421-11	CARBON METAL CARBON	1K 10K 6.2K 10K 2.2K	5% 5% 1% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R207 R208 R209 R210	8-729-119-76 8-729-119-76 8-729-119-76 8-729-119-76	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	2SA1175-HF 2SA1175-HF 2SA1175-HF 2SA1175-HF	E FE FE		R502 R503 R504 R505 R506	1-249-429-11 1-249-441-11 1-249-429-11 1-215-437-00 1-215-433-00	CARBON CARBON METAL	10K 100K 10K 4.7K 3.3K	5% 5% 5% 1%	1/4W 1/4W 1/4W 1/4W 1/4W	
R208 R209 R210	0-729-119-70	<resistor></resistor>	23C2763-H	E		R507 R508 R509 R510	1-249-407-11 1-249-421-11 1-249-423-11 1-249-417-11	CARBON CARBON	150 2.2K 3.3K 1K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
	1-249-431-11 1-249-429-11 1-249-431-11 1-247-815-91 1-249-429-11	CARBON CARBON CARBON	15K 10K 15K 220 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	R511 R512 R513 R514	1-215-900-11 1-249-421-11	METAL OXIDE METAL OXIDE CARBON	470K 22K 22K 2.2K	5% 5% 5%	1/4W 3W 2W 1/4W 3W	FFF
R212 R213 R214 R215 R216	1-249-441-11 1-249-441-11 1-247-815-91 1-249-441-11 1-249-441-11	CARBON CARBON CARBON	100K 100K 220 100K 100K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	R515 R516 R517 R518 R519	1-249-430-11 1-249-429-11 1-249-427-11 1-249-417-11	CARBON CARBON	22K 12K 10K 6.8K 1K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	F F
R217 R218 R219 R220	1-247-807-31 1-247-807-31 1-249-417-11 1-249-429-11	CARBON CARBON CARBON	100 100 1K 10K	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	R520 R521 R522 R523	1-249-423-11 1-249-437-11 1-249-417-11 1-249-426-11	CARBON CARBON	3.3K 47K 1K 5.6K	5% 5% 5% 5%	1/4W 1/4W	F F F
R221 R222 R223 R224	1-249-437-11 1-249-417-11 1-249-429-11 1-249-429-11	CARBON CARBON	47K 1K 10K 10K	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	R524 R525 R526	1-216-373-11 1-216-478-11	METAL OXIDE METAL OXIDE METAL OXIDE	2.2 390	5% 5% 5%	3W 2W 3W	F F F
R230 R231 R233	1-249-427-11 1-249-429-11 1-249-429-11	CARBON CARBON	6.8K 10K 10K	5% 5%	1/4W 1/4W 1/4W	R529 R530	1-216-477-11	METAL OXIDE	270	(KP-46V 5% (KP-46V 5%	35/53V3 3W	35) F 35)
R234 R235 R236	1-249-441-11 1-249-414-11 1-249-432-11	CARBON CARBON CARBON	100K 560 18K	5% 5% 5%	1/4W 1/4W 1/4W	R531		METAL OXIDE		(KP-46V 5% (KP-46V	35/53V3 3W	F
R237 R238	1-249-414-11 1-249-431-11	CARBON	560 15K	5% 5%	1/4W 1/4W	R532 R533	1-215-442-00 1-215-443-00	METAL	7.5K 8.2K	1% 1%	1/4W 1/4W	
R239 R241 R242 R243	1-249-427-11 1-249-439-11 1-249-432-11 1-247-863-91	CARBON CARBON	6.8K 68K 18K 22K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	R534 R1001 R1002 R1003		METAL OXIDE METAL OXIDE	4.7K 22K 22K 330	1% 5% 5% 5%	1/4W 2W 2W 1/4W	F F
R244 R245 R246 R247 R248	1-247-863-91 1-249-437-11 1-247-863-91 1-249-430-11 1-249-437-11	CARBON CARBON CARBON	22K 47K 22K 12K 47K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	R1004 R1005 R1006 R1007 R1009	1-249-434-11 1-249-436-11 1-249-434-11 1-249-425-11 1-247-807-31	CARBON CARBON CARBON	27K 39K 27K 4.7K 100	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
R249 R250 R251	1-247-807-31 1-249-417-11 1-249-437-11	CARBON	100 1K 47K	5% 5% 5%	1/4W 1/4W 1/4W	R1010 R1011 R1012	1-249-411-11 1-249-425-11 1-249-425-11	CARBON	330 4.7K 4.7K	5% 5% 5%	1/4W 1/4W 1/4W	

The componants identified by shading and mark A are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque  $\Delta$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.







REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		F	REMARK
R1013 R1014 R1016	1-247-807-31 1-249-436-11 1-247-807-31	CARBON	100 39K 100	5% 5%	1/4W 1/4W 1/4W	R2907 R2908 R2909 R2910	1-249-417-11 1-249-414-11 1-249-413-11 1-249-429-11	CARBON CARBON	1K 560 470	5% 5% 5%	1/4W 1/4W 1/4W
R1017 R1018 R1019	1-249-417-11 1-215-432-00 1-249-441-11	CARBON METAL	1K 3K 100K	5% 1% 5%	1/4W 1/4W 1/4W 1/4W	R2911 R2912 R2913 R2914 R2915	1-249-427-11 1-249-425-11 1-249-429-11 1-249-437-11 1-249-429-11	CARBON CARBON CARBON CARBON	10K 47K 4.7K 10K 47K 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W 1/4W
RY230 RY231	1-755-028-11 1-755-028-11		IR>			R2916 R2917 R2918 R2919 R2920	1-249-437-11 1-249-429-11 1-247-863-91 1-247-863-91 1-249-425-11	CARBON CARBON CARBON	47K 10K 22K 22K 4.7K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W
		TRANSFORMER		NTAL D	RIVE	R2921 R2922 R2923 R2925 R2926	1-249-425-11 1-247-815-91 1-249-425-11 1-247-815-91 1-247-815-91	CARBON CARBON CARBON	4.7K 220 4.7K 220 220	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W
TU1002 /	<u>8-598-254-00</u>	TUNER BTF-LA TUNER BTF-WA	<b>.</b> 402	******	*****	R2927 R2928 R2929 R2930 R2931	1-249-429-11 1-249-429-11 1-249-429-11 1-249-425-11 1-249-429-11	CARBON CARBON CARBON	10K 10K 10K 4.7K 10K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W
	* A-1304-087-A	MB BOARD, C				R2932 R2933 R2934 R2935 R2936	1-249-429-11 1-249-429-11 1-249-429-11 1-249-429-11 1-249-423-11	CARBON CARBON CARBON	10K 10K 10K 10K 3.3K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W
C2901	1-102-116-00	<capacitor></capacitor>	680PF	10%	50V						
C2901 C2902 C2903 C2904 C2905	1-102-116-00 1-102-116-00 1-101-004-00 1-126-964-11 1-126-964-11	CERAMIC CERAMIC ELECT	680PF 0.01MF 10MF 10MF	10% 10% 20% 20%	50V 50V 50V 50V	afer nife nife nife nife nife nife nife nife		****************  M BOARD, CO	MPLETE	e sje sje sje sje sje sje s	işt nişt nişt nişt nişt nişt nişt nişt
C2906 C2907 C2908	1-101-004-00 1-101-004-00 1-126-964-11	CERAMIC	0.01MF 0.01MF 10MF	20%	50V 50V 50V			<capacitor></capacitor>			
CN2957	* 1-564-515-11	<connector> PLUG, CONNEC</connector>				C001 C002 C004 C005 C006	1-163-001-11		220PF	20% 20% 10% 10% 10%	16V 6.3V 50V 50V 50V
IC2901 IC2902 IC2903	8-759-984-03	<ic> IC NJM2129D IC LM339N IC CXA1315P</ic>				C007 C009 C010 C011 C012	1-163-001-11 1-163-001-11 1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	220PF 220PF 220PF	10% 10% 10% 10% 10%	50V 50V 50V 50V 50V
Q2901 Q2902 Q2903	8-729-119-76	<transistor> TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2:</transistor>	SA1175-HF SA1175-HF	E		C013 C014 C015 C016 C017	1-163-001-11 1-163-001-11 1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	220PF 220PF 220PF	10% 10% 10% 10% 10%	50V 50V 50V 50V 50V
Q2904 Q2905 Q2906	8-729-119-76 8-729-119-78	TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2:	SA1175-HF SC2785-HF	E E		C018 C019 C020 C021	1-163-001-11 1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	220PF 220PF	10% 10% 10% 10%	50V 50V 50V 50V
Q2908 Q2908 Q2909	8-729-119-76 8-729-119-78	TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2:	SA1175-HF SC2785-HF	E E		C022 C023	1-163-001-11 1-163-001-11	CERAMIC CHIP	220PF 220PF	10% 10%	50V 50V
neoc:	1.040.400.5	<resistor></resistor>	107-		144	C024 C025 C026 C028	1-163-001-11 1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	220PF 220PF	10% 10% 10% 10%	50V 50V 50V 50V
R2901 R2902 R2903 R2904 R2905	1-249-429-11 1-249-429-11 1-249-417-11 1-249-429-11 1-249-429-11	CARBON CARBON CARBON	10K 10K 1K 10K 10K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	C029 C030 C031 C032 C033	1-163-001-11 1-163-001-11 1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	220PF 220PF 220PF	10% 10% 10% 10% 10%	50V 50V 50V 50V 25V
R2906	1-249-414-11	CARBON	560	5%	1/4W	2333			310 771711	2070	



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C034 C035	1-163-001-11 1-124-903-11	CERAMIC CHIP	220PF 1MF	10% 20%	50V 50V	C355	1-126-965-11	ELECT	22MF	20%	50V
C037 C038 C040		CERAMIC CHIP ELECT		10% 20% 20%	50V 16V 50V	C357 C358 C359 C360		CERAMIC CHIP CERAMIC CHIP		20% 5% 5% 20%	25V 50V 50V 50V
C041 C042 C046 C047 C048	1-163-001-11 1-163-125-00 1-124-903-11		220PF 220PF 1MF	10% 10% 5% 20%	50V 50V 50V 50V	C361 C362 C363	1-126-964-11 1-163-235-11 1-163-009-11	ELECT CERAMIC CHIP CERAMIC CHIP	10MF 22PF 0.001MF	20% 5% 10%	50V 50V 50V
C049 C050	1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	220PF	5% 10%	50V 50V 50V	C364 C365 C366		CERAMIC CHIP CERAMIC CHIP		20% 5% 5%	50V 50V 50V
C051 C054 C055	1-163-017-00 1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.0047MF 220PF	10% 10% 10%	50V 50V 50V	C368 C369 C370 C371	1-163-227-11 1-163-809-11 1-104-665-11 1-104-665-11		10PF 0.047MF 100MF 100MF	0.5PF 10% 20% 20%	50V 25V 25V 25V
C056 C057 C058 C060	1-163-229-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	12PF	10% 5% 5% 20%	50V 50V 50V 50V			<chip conduc<="" td=""><td>TOR&gt;</td><td></td><td></td></chip>	TOR>		
C062 C063	1-163-038-91 1-126-964-11	CERAMIC CHIP ELECT	0.1MF 10MF	20%	25V 50V	CJ001 CJ002 CJ003	1-216-295-91	CONDUCTOR, C CONDUCTOR, C CONDUCTOR, C	HIP		
C064 C065 C066 C067		CERAMIC CHIP CERAMIC CHIP		20% 5% 5%	50V 25V 50V 50V			<connector></connector>			
C068 C069 C070 C071 C074	1-137-367-11 1-137-375-11 1-104-664-11 1-124-464-11 1-126-935-11	FILM FILM ELECT ELECT	0.0033MF 0.068MF 47MF 0.22MF 470MF		50V 50V 25V 50V 16V	CN046 CN052 CN053 CN054 CN070	*1-564-507-11 *1-564-507-11 1-573-979-21	PLUG, CONNEC PLUG, CONNEC PLUG, CONNEC CONNECTOR, B PLUG, CONNEC	TOR 4P TOR 4P OARD TO	BOAR	D 11P
C075 C076 C302 C303 C304	1-163-031-11	CERAMIC CHIP CERAMIC CHIP ELECT ELECT	0.01MF	5% 20% 20% 20%	50V 50V 50V 50V 50V	CN304 CN314 CN321 CN322 CN351	*1-564-509-11 1-573-301-21 1-573-301-21	PLUG, CONNEC PLUG, CONNEC CONNECTOR, B CONNECTOR, B PLUG, CONNEC	TOR 6P OARD TO OARD TO		
C309 C310 C311 C312 C313	1-163-017-00 1-124-925-11	CERAMIC CHIP	0.0047MF 2.2MF	10% 20%	50V 50V 50V 50V 25V	CN355 CN356 CN357 CN358	*1-566-367-11 *1-564-516-11	CONNECTOR (R CONNECTOR, H PLUG, CONNEC PLUG, CONNEC	IINGE (RE TOR 13P		
C314		CERAMIC CHIP			50V			<diode></diode>			
C315 C316 C317 C318		TANTALUM CERAMIC CHIP	220MF 33MF 0.01MF 2.2MF	20% 10% 20%	16V 16V 50V 50V	D001 D002 D003 D004 D005	8-719-404-46 8-719-404-46 8-719-109-89	DIODE MA110 DIODE MA110 DIODE MA110 DIODE RD5.6ES DIODE RD5.6ES	B2 B2		
C319 C320 C321 C323 C324		ELECT CERAMIC CHIP CERAMIC CHIP		20% 20% 10% 20%	50V 50V 50V 50V 50V	D006 D007 D008 D009 D010	8-719-109-89 8-719-109-89 8-719-002-81 8-719-404-46	DIODE RD5.6ES DIODE RD5.6ES DIODE 1T363 DIODE MA110 DIODE MA110	В2		
C327 C328 C329 C338 C339	1-163-251-11		100PF	5% 5% 10% 20% 20%	50V 50V 50V 50V 50V	D011 D012 D013 D014 D015	8-719-404-46 8-719-404-46 8-719-404-46 8-719-404-46	DIODE MA110 DIODE MA110 DIODE MA110 DIODE MA110 DIODE MA110			
C340 C341 C342 C343 C344	1-163-001-11 1-163-001-11 1-163-001-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	220PF 220PF 220PF	5% 10% 10% 10%	50V 50V 50V 50V 50V	D016 D017 D018 D019 D020	8-719-404-46 8-719-404-46 8-719-404-46 8-719-404-46	DIODE MA110 DIODE MA110 DIODE MA110 DIODE MA110 DIODE RD5.6M-	R2		
C345 C346 C347 C348 C349	1-163-031-11 1-124-902-00 1-163-231-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP	0.01MF 0.47MF 15PF	20% 5% 5%	50V 50V 50V 50V 50V	D305 D307 D308 D309 D310	8-719-923-60 8-719-923-60 8-719-110-22 8-719-109-84	DIODE MTZJ-T- DIODE MTZJ-T- DIODE RD11ESI DIODE RD5.1ES DIODE DAP202I	77-9.1A 77-9.1A 32 B1		
C350 C352 C353 C354	1-104-665-11	CERAMIC CHIP	100MF	20% 20% 5%	50V 50V 25V 50V	D311 D312 D313	8-719-914-43 8-719-404-46	DIODE DAN2021 DIODE MA110 DIODE MA110			



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
D314 D315		DIODE MA110 DIODE RD5.6ESB2		Q318 Q319	8-729-422-27 8-729-422-27	TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q		
D316 D317 D321 D322 D323	8-719-110-22 8-719-404-46 8-719-404-46	DIODE MA110 DIODE RD11ESB2 DIODE MA110 DIODE MA110 DIODE MA110		Q320 Q321 Q322	8-729-422-27	TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q		
D324	8-719-404-46	DIODE MA110				<resistor></resistor>		
D325 D326 D327 D328	8-719-404-46 8-719-110-08 8-719-404-46	DIODE MA110 DIODE RD8.2ESB2 DIODE MA110 DIODE 1SS133T-77		R001 R002 R003 R004 R005	1-216-049-91 1-216-033-00 1-216-033-00	METAL GLAZE 1K METAL GLAZE 1K METAL GLAZE 220 METAL GLAZE 220 METAL GLAZE 220	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
		<ic></ic>		R006		METAL GLAZE 220	5%	1/10W
IC001 IC002 IC003 IC004	8-752-841-13 8-759-370-33 8-759-328-12	IC uPC78N05H IC CXP85340A-060S IC ST24C04FB6 IC Z8622812PSC		R007 R008 R009 R010	1-216-033-00 1-216-033-00	METAL GLAZE 220 METAL GLAZE 220 METAL GLAZE 220 METAL GLAZE 10K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
IC005	8-759-370-31	IC ST24C01FB6		R011 R012		METAL GLAZE 220 METAL GLAZE 220	5% 5%	1/10W 1/10W
IC006 IC301 IC302		IC MN1280-S IC CXA1477AS IC TA7805S		R013 R014 R015	1-216-073-00 1-216-073-00	METAL GLAZE 10K METAL GLAZE 10K METAL GLAZE 220	5% 5% 5%	1/10W 1/10W 1/10W
		<coil></coil>		R016 R017		METAL GLAZE 220 METAL GLAZE 10K	5% 5%	1/10W 1/10W
L003 L004 L005	1-410-476-11	INDUCTOR 10UH INDUCTOR 33UH INDUCTOR 10UH		R018 R019 R020	1-216-049-91 1-216-033-00	METAL GLAZE 1K METAL GLAZE 220 METAL GLAZE 220	5% 5% 5%	1/10W 1/10W 1/10W
L006 L302		INDUCTOR 10UH INDUCTOR 22UH		R021 R022		METAL GLAZE 220 METAL GLAZE 100K	5% 5%	1/10W 1/10W
L303 L304		INDUCTOR 39UH INDUCTOR 6.8UH		R023 R024 R025	1-216-121-91 1-216-065-00	METAL GLAZE 1M METAL GLAZE 4.7K METAL GLAZE 10K	5% 5% 5%	1/10W 1/10W 1/10W
		<transistor></transistor>		R026 R027		METAL GLAZE 10K METAL GLAZE 47K	5% 5%	1/10W 1/10W
Q001	8-729-216-22	TRANSISTOR 2SA1162-G		R028 R029	1-216-065-00	METAL GLAZE 4.7K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W
Q002 Q003	8-729-422-27 8-729-422-27	TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q		R030	1-216-073-00	METAL GLAZE 10K	5%	1/10W
Q004 Q005	8-729-422-27	TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-Q		R031 R032	1-216-065-00	METAL GLAZE 4.7K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W
Q006	8-729-422-27	TRANSISTOR 2SD601A-Q		R033 R034	1-216-073-00	METAL GLAZE 10K	5% 5%	1/10W 1/10W
Q007 Q009	8-729-422-27	TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-Q		R035		METAL GLAZE 220	5%	1/10W
Q011 Q012	8-729-422-27	TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-Q		R036 R037	1-216-033-00	METAL GLAZE 100 METAL GLAZE 220	5% 5%	1/10W 1/10W
Q013		TRANSISTOR 2SA1162-G		R038 R039	1-216-025-91	METAL GLAZE 220 METAL GLAZE 100	5% 5%	1/10W 1/10W
Q014 Q015	8-729-422-27	TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-Q		R040		METAL GLAZE 220	5%	1/10W
Q016 Q017	8-729-216-22 8-729-422-27	TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-Q		R041 R042	1-216-033-00	METAL GLAZE 220 METAL GLAZE 220	5% 5%	1/10W 1/10W
Q018		TRANSISTOR 2SA1162-G		R043 R044	1-216-089-91	METAL GLAZE 10K METAL GLAZE 47K	5% 5%	1/10W 1/10W
Q019 Q301	8-729-216-22	TRANSISTOR 2SD601A-Q TRANSISTOR 2SA1162-G		R045		METAL GLAZE 220	5%	1/10W
Q302 Q303		TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G		R046 R047	1-216-033-00	METAL GLAZE 220 METAL GLAZE 220	5% 5%	1/10W 1/10W
Q304		TRANSISTOR 2SA1162-G		R048 R049		METAL GLAZE 10K METAL GLAZE 220	5% 5%	1/10W 1/10W
Q305 Q307	8-729-422-27	TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q		R050		METAL GLAZE 1K	5%	1/10 <b>W</b>
Q308 Q309		TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G		R051 R052	1-216-065-00	METAL GLAZE 1K METAL GLAZE 4.7K	5% 5%	1/10W 1/10W
Q310		TRANSISTOR 2SD601A-Q		R054 R055	1-216-049-91	METAL GLAZE 10K METAL GLAZE 1K	5% 5%	1/10W 1/10W
Q311 Q312	8-729-422-27	TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q		R056	1-216-049-91	METAL GLAZE 1K	5%	1/10 <b>W</b>
Q313 Q314		TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q		R057 R058	1-216-073-00	METAL GLAZE 4.7K METAL GLAZE 10K	5% 5%	1/10W 1/10W
Q315 Q316		TRANSISTOR 2SD601A-Q		R059 R060	1-216-065-00	CONDUCTOR, CHIP METAL GLAZE 4.7K	5%	1/10W
Q316 Q317		TRANSISTOR 2SD601A-Q TRANSISTOR 2SA1162-G		R061	1-210-033-00	METAL GLAZE 220	5%	1/10W



<b></b>									
REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION	1	REMARK
R062 R063		METAL GLAZE 33K METAL GLAZE 470	5% 5%	1/10W 1/10W	R311	1-216-025-91	METAL GLAZE 100	5%	1/10 <b>W</b>
R064	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	R312	1-216-033-00	METAL GLAZE 220	5%	1/10W
R065		METAL GLAZE 100K	5%	1/10W	R313	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R066	1-216-049-91	METAL GLAZE 1K	5%	1/10W	R314	1-216-033-00	METAL GLAZE 220	5%	1/10W
					R315	1-216-067-00	METAL GLAZE 5.6K	5%	1/10W
R067		METAL GLAZE 1K	5%	1/10W	R317	1-216-033-00	METAL GLAZE 220	5%	1/10W
R068		METAL GLAZE 1K	5%	1/10W					
R069		METAL GLAZE 10K	5%	1/10W	R318		METAL GLAZE 8.2K	5%	1/10 <b>W</b>
R071		METAL GLAZE 10K	5%	1/10W	R319		METAL GLAZE 470	5%	1/8W
R072	1-216-041-00	METAL GLAZE 470	5%	1/10W	R320		METAL GLAZE 4.7K	5%	1/10W
R073	1 216 0/0 01	METAL GLAZE 1K	5%	1/10W	R321 R323		METAL GLAZE 470	5%	1/8W
R074		METAL GLAZE 1K	5%	1/10W 1/10W	K323	1-210-293-91	CONDUCTOR, CHIP		
R075		METAL GLAZE 6.8K	5%	1/10W	R324	1-216-025-01	METAL GLAZE 100	5%	1/10W
R076		METAL GLAZE 47K	5%	1/10W	R325		METAL GLAZE 560	5%	1/10W
R079		METAL GLAZE 22K	5%	1/10W	R326		METAL GLAZE 15K	5%	1/10W
					R327		METAL GLAZE 220	5%	1/10W
R080		METAL GLAZE 82	5%	1/10W	R328	1-216-025-91	METAL GLAZE 100	5%	1/10W
R081		METAL GLAZE 470	5%	1/10W					
R082		METAL GLAZE 68K	5%	1/10W	R329		METAL GLAZE 33K	5%	1/10W
R083		METAL GLAZE 4.7K	5%	1/10W	R330		METAL GLAZE 390	5%	1/10W
R084	1-216-073-00	METAL GLAZE 10K	5%	1/10W	R331		METAL GLAZE 2.7K	5%	1/10W
DAGE	1 216 000 01	METAL OLAZE AZV	e cri	1/1007	R332		METAL GLAZE 1K	5%	1/10W
R085 R086		METAL GLAZE 47K METAL GLAZE 100K	5%	1/10W	R333	1-208-810-11	METAL CHIP 15K	0.50%	1/10 <b>W</b>
R087		METAL GLAZE 100K	5% 5%	1/10W 1/10W	R335	1-216-022-00	METAL GLAZE 220	5%	1/10W
R088		METAL GLAZE 47K	5%	1/10W	R336		METAL GLAZE 220	5%	1/10W
R089		METAL GLAZE 4.7K	5%	1/10W	R337		METAL GLAZE 1K	5%	1/10W
				2,00	R338		METAL GLAZE 1K	5%	1/10W
R090	1-216-073-00	METAL GLAZE 10K	5%	1/10W	R339	1-216-655-11	METAL CHIP 1.5K	0.50%	1/10W
R091		METAL GLAZE 22K	5%	1/10W	1				
R092		METAL GLAZE 22K	5%	1/10W	R340		METAL GLAZE 220	5%	1/10W
R093		CONDUCTOR, CHIP		4 44 0000	R341		METAL GLAZE 220	5%	1/10W
R094	1-216-081-00	METAL GLAZE 22K	5%	1/10W	R342		METAL GLAZE 220	5%	1/10W
R095	1.216.091.00	METAL GLAZE 22K	5%	1/10W	R343 R344		METAL GLAZE 15K	5%	1/10W
R096		METAL GLAZE 22K	5%	1/10W	K344	1-210-073-00	METAL GLAZE 10K	5%	1/10W
R097		METAL GLAZE 22K	5%	1/10W	R345	1-216-025-91	METAL GLAZE 100	5%	1/10W
R098		METAL GLAZE 22K	5%	1/10W	R346		METAL GLAZE 330	5%	1/10W
R099		METAL GLAZE 22K	5%	1/10W	R347		METAL GLAZE 470	5%	1/10W
					R348	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R100		CONDUCTOR, CHIP			R352	1-216-057-00	METAL GLAZE 2.2K	5%	1/10W
R101		METAL GLAZE 4.7K	5%	1/10W	Daga	1 017 070 00	AFTAL OLAGE COL	501	1 /1 0337
R102 R103		METAL GLAZE 47K	5%	1/10W	R353		METAL GLAZE 6.8K	5%	1/10W
R103		METAL GLAZE 680 METAL GLAZE 220	5% 5%	1/10W 1/10W	R354 R355		METAL GLAZE 1.5K METAL GLAZE 8.2K	5% 5%	1/10W 1/10W
KIO+	1-210-055-00	METAL GLAZE 220	370	1/10 W	R356		METAL GLAZE 6.2K	5%	1/10W
R106	1-216-033-00	METAL GLAZE 220	5%	1/10W	R357		METAL GLAZE 180	5%	1/10W
R107		METAL GLAZE 220	5%	1/10W				•	.,
R108		METAL GLAZE 220	5%	1/10W	R358		METAL GLAZE 1K	5%	1/10W
R109		METAL GLAZE 220	5%	1/10W	R359	1-216-037-00	METAL GLAZE 330	5%	1/10 <b>W</b>
R110	1-216-033-00	METAL GLAZE 220	5%	1/10W	R360		METAL GLAZE 270	5%	1/10W
D111	1 016 040 01	METAL CLATE IN	E (1)	1 /1 0337	R361		METAL GLAZE 1K	5%	1/10W
R111 R112		METAL GLAZE 1K METAL GLAZE 47K	5% 5%	1/10W	R362	1-210-033-00	METAL GLAZE 270	5%	1/10W
R112		METAL GLAZE 47K	5%	1/10W 1/10W	R363	1-216-040-01	METAL GLAZE 1K	5%	1/10W
R114		METAL GLAZE 4.7K	5%	1/10W	R364		METAL GLAZE 100	5%	1/10W
R115		METAL GLAZE 4.7K	5%	1/10W	R366		METAL GLAZE 1.5K	5%	1/10W
			_ /-	_, _ , ,	R367		METAL GLAZE 2.2K	5%	1/10W
R116		METAL GLAZE 4.7K	5%	1/10 <b>W</b>	R368		METAL GLAZE 100	5%	1/10W
R117		METAL GLAZE 820	5%	1/10W	1				
R118		METAL GLAZE 820	5%	1/10W	R369		METAL GLAZE 3.3K	5%	1/10W
R119		METAL GLAZE 820	5%	1/10W	R370		METAL GLAZE 220	5%	1/10W
R120	1-210-033-00	METAL GLAZE 220	5%	1/10W	R371		METAL GLAZE 1X	5%	1/10W
R122	1_216 022 00	METAL GLAZE 220	5 OL	1/10W	R372 R373		METAL GLAZE 1.2K METAL GLAZE 270	5% 5%	1/10W
R122		METAL GLAZE 220 METAL GLAZE 220	5% 5%	1/10W 1/10W	K3/3	1-210-033-00	WIETAL GLAZE 2/0	5%	1/10W
R123		METAL GLAZE 220 METAL GLAZE 220	5%	1/10W	R374	1-216-085-00	METAL GLAZE 33K	5%	1/10W
R300		METAL GLAZE 100	5%	1/10W	R375		METAL GLAZE 33K	5%	1/10W
R301		METAL GLAZE 2.7K	5%	1/10W	R376		METAL GLAZE 68K	5%	1/10W
					R377		METAL GLAZE 560	5%	1/10W
R302		METAL GLAZE 1K	5%	1/10W	R378		METAL GLAZE 2.7K	5%	1/10W
R303		METAL GLAZE 1K	5%	1/10W	Dage	1 04 2 000 00	ACCOUNT OF ACCOUNT	# A4	4 /- 0
R304		METAL GLAZE 100	5%	1/10W	R379		METAL GLAZE 27K	5%	1/10W
R305		METAL GLAZE 100	5% 5%	1/10W	R380		METAL GLAZE 100K	5% 5%	1/10W
R306	1-210-023-91	METAL GLAZE 100	5%	1/10W	R381 R382		METAL GLAZE 8.2K METAL GLAZE 33K	5% 5%	1/10W 1/10W
R307	1-216-057-00	METAL GLAZE 2,2K	5%	1/10W	R383		METAL GLAZE 55K	5%	1/10W
R308		METAL GLAZE 2.2K	5%	1/10W	1000	1 210:073-71	Guinde Jou	570	411044
R309		METAL GLAZE 100	5%	1/10W	R384	1-216-053-00	<b>METAL GLAZE 1.5K</b>	5%	1/10W
R310	1-216-081-00	METAL GLAZE 22K	5%	1/10W	R385	1-216-085-00	METAL GLAZE 33K	5%	1/10 <b>W</b>
					1				

The components identified by shading and mark A are critical for safety. Replace only with part number specified.

Les composants identifies par une trame et une marque \(\Lambda\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.





REF. N	O. PART NO.	DESCRIPTION		l	© REMARK	REF. NO.	PART NO.	DESCRIPTION	1		REMARK	
R386	1-216-121-91	METAL GLAZE	1M	5%	1/10W	C680	1-124-903-11	FIECT	1MF	20%	50V	
R387 R388	1-216-049-91	METAL GLAZE METAL GLAZE	1K	5% 5%	1/10W 1/10W	C682 C683	1-124-903-11 1-107-635-11	ELECT	1MF 4.7MF	20% 20% 20%	50V 160V	
R389 R390		METAL GLAZE METAL GLAZE		5% 5%	1/10W	C690 C691	1-126-934-11		220MF	20%	16V	
R391	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W 1/10W	C091	1-126-964-11	ELECT	10MF	20%	50V	
R392 R393		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	1 1 1 1 1 1 1 1 1		<connecto< td=""><td>OR&gt;</td><td></td><td></td><td></td></connecto<>	OR>			
R394	1-216-295-91	CONDUCTOR, C	CHIP			CN606 CN609	1-695-915-11 *1-564-507-11					
		~~~·				CN610	*1-573-963-11	PIN, CONNE	CTOR (PC BC	DARD) 3	P	
		<crystal></crystal>				CN615 CN616	1-695-915-11 *1-564-507-11					
X001 X301		VIBRATOR, CR OSCILALTOR, C				CN617	*1-580-843-11	PIN CONNE	CTOR (POWI	<b>:R</b> )		
X302		OSCILLATOR, C				CN624	*1-564-507-11	PLUG, CON	NECTOR 4P	J1()		
						CN625 CN626	*1-564-513-11 *1-564-506-11	PLUG, CON	NECTOR 3P			
****	*****	******	*****	*****	******	CN653	*1-564-507-11	PLUG, CON	NECTOR 4P			
	* A-1316-257-4	A G BOARD, CO	MPI ETE			CN681	*1-573-986-11	PIN, CONNE	CTOR (PC BC	DARD) 5	P	
	A-1310-237-F	********				8 9 9 9						
		PLATE, SHIELD						<diode></diode>				
	4-382-854-11	SCREW (M3X10	), P, SW (+	)		D601 D604	<b>A 8-719-052-29</b> 8-719-991-33					8
		-CARACITOR				D605	8-719-991-33	DIODE 1SS1	33T-77			
1000-4600-6640-6600		<capacitor></capacitor>				D606 D607	8-719-991-33 8-719-991-33					
C601 C602	± 1-136-311-51 ± 1-113-920-91		0.47MF 0.0022MF		125V 250V	D608	8-719-991-33	DIODE 1881	33T-77			
C603 C604	▲ 1-113-920-91		0.0022MF		250V 200V	D609 D610	8-719-991-33	DIODE 1SS1	33T-77			
C605		ELECT(BLOCK)		20%	200V	D611	8-719-991-33 8-719-991-33	DIODE 1SS1	33T-77			
C608	1-164-645-11		1000PF	10%	500V	D651	8-719-052-91	DIODE DASE	3S4-F			
C609 C610	1-164-645-11 1-136-173-00		1000PF 0.47MF	10% 5%	500V 50V	D655 D656		DIODE D10S DIODE D2S4				
C611 C612	1-136-171-00 1-136-173-00	FILM	0.33MF 0.47MF	5%	50V	D657	8-719-022-97	DIODE D2S4	MF			
				5%	50V	D658 D659		DIODE D2S4 DIODE D2S4				
C613 C614	1-136-171-00 1-164-735-11	FILM CAPACITOR	0.33MF 0.0015MF	5% 10%	50V 500V	D660	8-719-052-86	DIODE D2L4	Ю-ТА			
C615 C616	1-129-720-00 ± 1-136-311-51		0.033MF 0.47MF	5% 20%	630V 125V	D661 D662	8-719-052-86		Ю-ТА			
C618	A 1-113-910-91		470PF	10%	250V	D663	8-719-052-31	DIODE DIN	L40-TR2			
C619	▲ 1-113-910-91	ELECT	470PF	10%	250V	D664	8-719-510-26	DIODE DINI	L20-TA			
C651 C652	1-128-548-11 1-128-548-11		4700MF 4700MF	20% 20%	25V 25V	D665 D666	8-719-991-33 8-719-110-58	DIODE 1SS1 DIODE RD22				
C653 C656	1-162-318-11 1-128-548-11	CERAMIC	0.001MF 4700MF	10% 20%	500V 25V	D667 D669		DIODE MTZ	J-11B			
						D670	8-719-110-41					
C657 C658	1-126-926-11 1-126-768-11		1000MF 2200MF	20% 20%	10V 16V	D671	8-719-991-33	DIODE 1SS1	33 <b>T</b> -77			
C659 C660	1-126-944-11 1-164-644-11		3300MF 330PF	20% 10%	25V 500V	D672 D673	8-719-109-54	DIODE RD2. DIODE RD18				
C661	1-123-024-21		33MF	20.0	160V	D674	8-719-991-33	DIODE 1SS1	33T-77			
C662	1-107-636-11		10MF	20%	160V	D675	8-719-109-85					
C663 C664	1-126-948-11 1-126-235-11		100MF 100MF	20% 20%	35V 6.3V	D676 D677	8-719-991-33 8-719-991-33					
C665 C667	1-126-964-11 1-126-951-11		10MF 470MF	20% 20%	50V 35V	D678 D679	8-719-991-33 8-719-991-33	DIODE 1SS1	33T-77			
						D680		DIODE 1331				
C668 C669	1-104-664-11 1-162-318-11		47MF 0.001MF	20% 10%	25V 500V	D681	8-719-200-82	DIODE 11ES	2			
C670 C671	1-104-664-11 1-104-664-11		47MF 47MF	20% 20%	25V 25V	D682 D683	8-719-200-82 8-719-200-82	DIODE HES				
C672	1-104-665-11		100MF	20%	25V	D685	8-719-991-33	DIODE 1SS1	33T-77			
C673	1-104-664-11		47MF	20%	25V	D686		DIODE 1SS1				
C674 C675	1-104-664-11 1-104-664-11		47MF 47MF	20% 20%	25V 25V	D687 D688	8-719-109-85 8-719-991-33					
C676 C677	1-104-664-11		47MF	20% 20%	25V 160V	D689 D690	8-719-991-33 8-719-109-89	DIODE 1881	33T-77			
						D691	8-719-991-33					
C678 C679	1-107-635-11 1-164-644-11		4.7MF 330PF	20% 10%	160V 500V	D693	8-719-991-33	DIODE 1SS1	33T-77			
			-			1						



Les composants identifies par une trame et une marque  $\Lambda$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK	<u> </u>
		<fuse></fuse>				R655	1-249-441-11	CARBON	100K	5%	1/4W	
F601 .		FUSE 6 3A/125V CLIP, FUSE ; F6 <ferrite beal<="" td=""><td>01</td><td></td><td></td><td>R656 R657 R658 R659 R660</td><td>1-216-369-00 1-249-429-11 1-247-883-00 1-249-417-11 1-249-417-11</td><td>CARBON CARBON</td><td>1 10K 150K 1K 1K</td><td>5% 5% 5% 5%</td><td>2W 1/4W 1/4W 1/4W 1/4W</td><td>F F</td></ferrite>	01			R656 R657 R658 R659 R660	1-216-369-00 1-249-429-11 1-247-883-00 1-249-417-11 1-249-417-11	CARBON CARBON	1 10K 150K 1K 1K	5% 5% 5% 5%	2W 1/4W 1/4W 1/4W 1/4W	F F
FB651 FB652		FERRITE BEAD FERRITE BEAD				R661	1-215-471-00 1-215-452-9 1-215-421-00 1-249-429-11 1-249-425-11	METAL METAL METAL CARBON	120K 20K 1K 10K 4.7K	1% 1% 1% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
IC651	* 1.010.041.11	POWER MODUL	D DW 40			R666	1-249-429-11					
IC652		IC MCT7812CT <coil></coil>				R667 R668 R670 R671	1-249-429-11 1-249-429-11 1-215-487-00 1-247-895-91 1-249-429-11	CARBON METAL CARBON	10K 10K 560K 470K 10K	5% 5% 1% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
L651 L652 L653 L654 L655	1-403-588-11 1-412-519-11 1-403-588-11	CIL, CHOKE 221 CIL, CHOKE 221 INDUCTOR 3.31 CIL, CHOKE 221 CIL, CHOKE 221	U <b>H</b> J <b>H</b> U <b>H</b>			R672 R673 R674 R675 R676	1-247-807-31 1-249-423-11 1-249-413-11 1-249-429-11 1-249-421-11	CARBON CARBON CARBON	100 3.3K 470 10K 2.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
L656 L657 L658	1-403-588-11	INDUCTOR 3.3U CIL, CHOKE 22U CIL, CHOKE 22U	JH JH			R677 R678 R679 R680 R681	1-249-417-11 1-249-423-11 1-249-423-11 1-249-413-11 1-249-425-11	CARBON CARBON CARBON	1K 3.3K 3.3K 470 4.7K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q601 Q602 Q651 Q652 Q653	8-729-019-49 8-729-820-82 8-729-119-76	TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2:	SC4834M SC4834M SA1208-S SA1175-HF			R682 R683 R684 R685 R686	1-249-403-11 1-249-417-11 1-249-417-11 1-247-863-91 1-249-429-11	CARBON CARBON CARBON	68 1K 1K 22K 10K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q654 Q655 Q656 Q657 Q658	8-729-119-76 8-729-230-45 8-729-119-76 8-729-119-78	TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2:	SA1175-HF SC2458-YC SA1175-HF SC2785-HF	E SR E E		R687 R688 R689 R690 R691	1-249-423-11 1-249-423-11 1-249-429-11 1-247-863-91 1-249-417-11	CARBON CARBON CARBON	3.3K 3.3K 10K 22K 1K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
Q659 Q660 Q661 Q662 Q663	8-729-119-76 8-729-119-76 8-729-119-76 8-729-119-76	TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2: TRANSISTOR 2:	SA1175-HF SA1175-HF SA1175-HF SA1175-HF	E E E		R693 R694 R695 R697 R698	1-249-425-11 1-249-425-11 1-249-429-11 1-249-413-11 1-249-429-11	CARBON CARBON CARBON	4.7K 4.7K 10K 470 10K	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	
		<resistor></resistor>				R699	1-249-417-11	CARBON	1 <b>K</b>	5%	1/4W	
R602	£ 1-219-236-91		2,2M	YAA	LOW			<relay></relay>				
R603 R604 R605		WIREWOUND CARBON CARBON	2.2 330K 330K 0.1	20% 5% 5% 5% 10%	1/2W 10W 1/4W 1/4W 1/2W F		1-755-032-11 1-755-032-11					
R607	1-247-891-00		330K	5%	1/4W			<transforme< td=""><td>ER&gt;</td><td></td><td></td><td></td></transforme<>	ER>			
R608 R609 R610 R611	1-247-891-00	CARBON METAL OXIDE CARBON	330K 1 330K 330K	5% 5% 5% 5%	1/4W 2W F 1/4W 1/4W	T602 A T603 A T604 A	1-429-728-11 1-423-665-11 1-427-864-11	TRANSFORMEI TRANSFORMEI TRANSFORMEI TRANSFORMEI TRANSFORMEI	CONVE POWER CONVE	RTER (F RTER (F		
R612 R613 R614 R615 R616	1-216-369-00 1-247-791-91 1-247-791-91 1-247-791-91 1-247-791-91	CARBON CARBON	1 22 22 22 22 22	5% 5% 5% 5% 5%	2W F 1/4W 1/4W 1/4W 1/4W	ale ale ale ale ale ale ale ale	*****	****	******	****	******	t alpt alpt
R631 R632 R633 R634 R635	1-247-863-91 1-247-807-31 1-247-807-31 1-249-417-11 1-249-425-11	CARBON CARBON CARBON	22K 100 100 1K 4.7K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		* A-1331-498-A	CR BOARD, C ************* <capacitor></capacitor>				
R636 R651 R653 R654	1-249-413-11 1-216-370-11 1-249-418-11 1-215-473-00	METAL OXIDE CARBON	470 1.2 1.2K 150K	5% 5% 5% 1%	1/4W 2W F 1/4W F 1/4W	C701 C702 C703 C704	1-104-664-11 1-107-662-11 1-161-754-00 1-126-768-11	ELECT CERAMIC	47MF 22MF 0.001MF 2200MF	20% 20% 10% 20%	25V 250V 2KV 16V	

The componants identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number

specified.

Les composants identifies par une trame et une marque extstyle e les remplacer que par une piece portant le numero specifie.





REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			DEMARK
******			0.011.05			**********		DESCRIPTION			REMARK
C705 C706	1-102-050-00 1-102-953-00		0.01MF 18PF	5%	500V 50V	R716 R718	1-249-437-11 1-249-417-11		47K 1K	5% 5%	1/4W 1/4W
C707 C708	1-102-129-00 1-104-664-11	CERAMIC	0.01MF 47MF	10% 20%	50V 25V	R719 R720	1-247-807-31 1-249-437-11		100 47K	5% 5%	1/4W 1/4W
C709 C710	1-107-651-11 1-102-157-00	ELECT	4.7MF 560PF	20% 10%	250V 500V	R721	1-202-549-00	SOLID	100	20%	1/2W
C714						R722	1-202-549-00	SOLID	100	20%	1/2W
C715	1-162-115-00 1-101-005-00	CERAMIC	330PF 0.022MF	10%	2KV 50V			<spark gap=""></spark>			
C716	1-102-050-00	CERAMIC	0.01MF		500V	SG701		GAP, SPARK			
		<connector></connector>	•			SG702 SG703		GAP, SPARK GAP, SPARK			
		PIN, CONNECTO		ITCH)	IP .						
CN703	*1-564-512-11	PLUG, CONNEC	TOR 9P			******	******	******	******	****	****
CN704 CN705	* 1-564-512-11 * 1-564-511-11	PLUG, CONNEC	TOR 9P TOR 8P				* A-1331-499-A	CG BOARD, C	OMPLETE		
CN706	1-695-915-11	TAB (CONTACT	Γ)					********	*******		
		SOCKET, PICTU PLUG, CONNEC									
								<capacitor></capacitor>			
		<diode></diode>				C731 C732	1-161-754-00 1-107-662-11	ELECT	0.001MF 22MF	10% 20%	2KV 250V
D701 D702		DIODE 1SS133T DIODE 1SS133T				C733 C736	1-102-050-00 1-126-964-11		0.01MF 10MF	20%	500V 50V
D703 D704		DIODE 1SS133T DIODE MTZJ-13				C738	1-107-651-11		4.7MF	20%	250V
D705	8-719-210-21	DIODE 11EQS04	ŀ			C739 C740	1-102-965-00 1-126-964-11		39PF 10MF	5% 20%	50V 50V
D706 D707	8-719-991-33 8-719-921-86	DIODE 1SS133T DIODE MTZJ-13	-77			C741 C742	1-102-157-00 1-162-115-00	CERAMIC	560PF 330PF	10% 10%	500V 2KV
D708 D710	8-719-901-83	DIODE 1SS83 DIODE RD5.6ES				C743	1-101-005-00		0.022MF	10%	50V
D711		DIODE 188133T				C744	1-102-050-00	CERAMIC	0.01MF		500V
D713 D716		DIODE D1N20R DIODE MTZJ-13						<connector></connector>			
D717		DIODE MTZJ-13				CN731	*1_509_794_00	PIN, CONNECTO		ITCU\ 1	ם
		<ic></ic>				CN732	*1-564-512-11	PLUG, CONNEC	TOR 9P	псн, г	r
IC701	9 750 246 42	IC TDA61010/N	2			CN734	*1-564-511-11	PLUG, CONNEC PLUG, CONNEC	TOR 8P		
10701	6-739-3-02	ic ibadioiqai	3			CN735		TAB (CONTACT			
		<coil></coil>					A 1-251-179-11	SOCKET, PICTU	RE TUBE		
L701	1-408-429-00	INDUCTOR 470	UH					<diode></diode>			
		<neon lamp=""></neon>				D731	8-710-021-86	DIODE MTZJ-13			
NL701	1-519-108-33	LAMP, NEON				D732 D736	8-719-901-83	DIODE 1SS83 DIODE D1N20R			
112/01	1-315-106-22	LAWI, NEON				D737		DIODE MTZJ-13			
		<transistor:< td=""><td>•</td><td></td><td></td><td></td><td></td><td>40</td><td></td><td></td><td></td></transistor:<>	•					40			
Q701	8-729-119-76	TRANSISTOR 2	SA1175-HF	Æ		IC721	9 750 246 42	<ic></ic>	2		
		~DECICTORS				IC731	8-739-340-42	IC TDA6101Q/N	3		
D701	1 215 411 00	<resistor></resistor>	200	1.07	1//337			<coil></coil>			
R701 R702	1-215-411-00 1-215-414-00	METAL	390 510	1% 1%	1/4W 1/4W	L731	1-408-429-00	INDUCTOR 470	UH		
R704 R706	1-202-847-00 1-249-407-11	CARBON	560K 150	20% 5%	1/2W 1/4W						
R707	1-215-423-00		1.2K	1%	1/4W			<neon lamp=""></neon>			
R708 R709	1-202-883-11 1-215-437-00	METAL	680K 4.7K	20% 1%	1/2W 1/4W	NL731	1-519-108-XX	KLAMP, NEON			
R710 R711	1-215-427-00 1-215-427-00	METAL	1.8 <b>K</b> 1.8 <b>K</b>	1% 1%	1/4W 1/4W			<resistor></resistor>			
R712		METAL OXIDE		5%	2W F	R731	1-202-847-00		560K	20%	1/2W
R713 R714	1-202-818-00 1-202-818-00		1K 1K	20% 20%	1/2W 1/2W	R733 R734	1-202-883-11 1-202-818-00	SOLID	680K 1K	20% 20%	1/2W 1/2W
R715	1-249-436-11		39K	5%	1/4W	R735	1-249-407-11		150	5%	1/4W







Les composants identifies par une trame et une marque 🛦 sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie. The components identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number applied. specified.

						***			8		
REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION		F	REMARK
R736	1-249-441-11		100K	5%	1/4W	R767 R768	1-202-818-00 1-202-549-00		1K 100	20% 20%	1/2W 1/2W
R737 R738 R739 R740 R741	1-202-818-00 1-202-549-00 1-215-420-00 1-215-427-00 1-249-437-11	SOLID METAL METAL	1K 100 910 1.8K 47K	20% 20% 1% 1% 5%	1/2W 1/2W 1/4W 1/4W 1/4W	R769 R770 R771 R773 R774	1-215-421-00 1-249-426-11 1-215-427-00 1-215-903-11 1-249-407-11	CARBON METAL METAL OXIDE	1K 5.6K 1.8K 68K 150	1% 5% 1% 5%	1/4W 1/4W 1/4W 2W F 1/4W
R742	1-215-903-11	METAL OXIDE	68K	5%	2W F	R775	1-202-549-00		100	20%	1/2W
		<spark gap=""></spark>						OD ARY CAR			
SG731 SG732 SG733	1-519-422-11	GAP, SPARK GAP, SPARK GAP, SPARK				SG761 SG762 SG763	1-519-422-11	<pre><spark gap=""> GAP, SPARK GAP, SPARK GAP, SPARK</spark></pre>			
nie	le ste ste ste ste ste ste ste ste ste st	******	****	*****	******						
	* A-1331-500-A	CB BOARD, C						******		de mie wae wie wie zije wie z	****
		****	****				* A-1341-885-A	E BOARD, CO!			
		<capacitor></capacitor>						SCREW (M3X10 RUBBER, SILIC			)
C761 C762	1-161-754-00 1-107-662-11	ELECT	0.001MF 22MF	10% 20%	2KV 250V			<capacitor></capacitor>			
C763 C766 C769	1-102-050-00 1-107-651-11 1-102-965-00	ELECT CERAMIC	0.01MF 4.7MF 39PF	20% 5%	500V 250V 50V	C801 C802 C803	1-110-626-11 1-163-251-11 1-110-626-11	<b>CERAMIC CHIP</b>	330MF 100PF 330MF	20% 5% 20%	160V 50V 160V
C770 C771	1-126-964-11 1-102-157-00	CERAMIC	10MF 560PF	20% 10%	50V 500V	C805 C806	1-136-173-00 1-102-030-00		0.47MF 330PF	5% 10%	50V 500V
C772 C773 C774	1-162-115-00 1-101-005-00 1-102-050-00	CERAMIC CERAMIC	330PF 0.022MF 0.01MF	10%	2KV 50V 500V	C807 C808 C809 C810	1-106-387-00 1-107-636-11 1-104-664-11 1-130-481-00	ELECT ELECT FILM	0.068MF 10MF 47MF 0.0068MF		200V 160V 25V 50V
CN741	*1 500 704 00	<connector></connector>		man.		C811	1-137-475-11		2.2MF	10%	250V
CN762 CN763 CN766	* 1-564-512-11 * 1-564-509-11 1-695-915-11	PIN, CONNECTO PLUG, CONNECTAB (CONTACT SOCKET PICTO	TOR 9P TOR 6P	псн)	IP	C812 C813 C814 C815 C818	1-126-965-11 1-162-318-11 1-126-968-11 1-162-114-00 1-109-833-11	CERAMIC ELECT CERAMIC	22MF 0.001MF 100MF 0.0047MF 0.0145MF	20% 10% 20%	50V 500V 50V 2KV 2.5KV
			***************************************			C819	1-130-489-00		0.033MF	5%	50V
D761 D762	8-719-901-83	<diode> DIODE MTZJ-13 DIODE 1SS83</diode>				C820 C823 C824 C825	1-124-902-00 1-136-601-11 1-126-964-11 1-162-318-11	ELECT FILM ELECT	0.47MF 0.01MF 10MF 0.001MF	20% 5% 20% 10%	50V 630V 50V 500V
D763 D764 D765	8-719-921-86	DIODE 1SS133T DIODE MTZJ-13 DIODE MTZJ-13	}			C826 C827 C828	1-130-467-00 1-107-651-11 1-111-036-11	ELECT	470PF 4.7MF 470MF	5% 20% 20%	50V 250V 16V
D768 D769		DIODE D1N20R DIODE MTZJ-13				C830 C831	1-137-420-11 1-126-934-11	FILM	0.047MF 220MF	10% 20%	100V 16V
		<ic></ic>				C832 C901		<b>CERAMIC CHIP</b>		20% 5%	50V 50V
IC761	8-759-346-42	IC TDA6101Q/N	3			C902 C903 C904	1-137-370-11 1-137-431-11 1-137-358-11	FILM	0.01MF 560PF 0.0001MF	5% 5% 5%	50V 50V 50V
		<coil></coil>				C905 C906	1-104-665-11 1-137-370-11		100MF 0.01MF	20% 5%	25V 50V
L761	1-408-429-00	INDUCTOR 470	UH			C906 C907 C908 C909	1-137-370-11 1-104-665-11 1-137-361-11 1-124-903-11	ELECT FILM	100MF 330PF 1MF	20% 5% 20%	25V 50V 50V
NL760	1_510.109.00	<neon lamp=""></neon>				C911		CERAMIC CHIP		5%	50V
NF/00	:1-212-100-77	LAMP, NEON <resistor></resistor>				C912 C913 C915 C916	1-124-903-11 1-124-903-11 1-163-239-11 1-126-963-11	ELECT CERAMIC CHIP	1MF 1MF 33PF 4.7MF	20% 20% 5% 20%	50V 50V 50V 50V
R761 R763 R764	1-202-847-00 1-202-883-11 1-202-818-00	SOLID	560K 680K 1K	20% 20% 20%	1/2W 1/2W 1/2W	C917 C918 C919	1-126-964-11 1-137-364-11 1-126-964-11	FILM	10MF 0.001MF 10MF	20% 5% 20%	50V 50V 50V



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C920 C921	1-124-902-00 1-126-964-11		0.47MF 10MF	20% 20%	50V 50V	D818 D819 D901	8-719-105-82	DIODE MA110 DIODE RD5.1M-B2 DIODE MA110	
C923 C924 C925	1-126-964-11 1-126-935-11 1-137-372-11	ELECT	10MF 470MF 0.022MF	20% 20% 5%	50V 16V 50V	D902 D904	8-719-404-46	DIODE MA110 DIODE MA110	
C926 C927	1-104-665-11 1-137-364-11	ELECT	100MF 0.001MF	20% 5%	25V 50V	D905 D907 D908	8-719-404-46	DIODE MA110 DIODE MA110 DIODE RD5,1M-B2	
C929 C930 C931	1-137-416-11 1-137-364-11 1-126-967-11	FILM	0.01MF 0.001MF 47MF	10% 5% 20%	100V 50V 50V	D909 D911	8-719-302-43	DIODE EL1Z DIODE RD5.1M-B2	
C932 C934	1-124-903-11 1-137-370-11	FILM	1MF 0.01MF	20% 5%	50V 50V	D912 D913 D914	8-719-404-46 8-719-404-46	DIODE RD5.1M-B2 DIODE MA110 DIODE MA110	
C935 C936 C937	1-137-399-11 1-126-964-11 1-126-964-11	ELECT	0.1MF 10MF 10MF	10% 20% 20%	100V 50V 50V	D915 D916	8-719-105-57	DIODE MA110 DIODE RD3.9M-B1	
C938 C939	1-126-935-11 1-126-964-11	ELECT	470MF 10MF	20% 20%	16V 50V	D917 D918 D919	8-719-404-46 8-719-106-81	DIODE MA110 DIODE MA110 DIODE RD13M-B3	
C940 C941 C942	1-104-664-11 1-126-964-11 1-104-664-11	ELECT	47MF 10MF 47MF	20% 20% 20%	25V 50V 25V	D920 D921		DIODE RD13M-B3	
C943 C944	1-126-965-11 1-126-964-11	ELECT	22MF 10MF	20%	50V 50V	D922 D923 D924	8-719-404-46 8-719-404-46	DIODE MA110 DIODE MA110 DIODE MA110	
C945 C946 C947	1-126-964-11 1-124-925-11 1-104-665-11	ELECT ELECT	10MF 2.2MF 100MF	20% 20% 20%	50V 50V 25V	D925 D926	8-719-404-46	DIODE MA3033-L DIODE MA110	
C948 C949	1-104-665-11 1-126-964-11	ELECT	100MF 10MF	20% 20%	25V 50V	D927	8-719-401-32	DIODE MA3047M-TX	
C950 C951	1-126-964-11 1-109-889-11	ELECT	10MF 1MF	20% 20%	50V 50V			<ferrite bead=""></ferrite>	
C955 C980	1-126-964-11 1-137-368-11		10MF 0.0047MF	20% 5%	50V 50V	FB001	1-410-396-41	FERRITE BEAD INDUCTOR	0.45UH
		<chip conduc<="" td=""><td>CTOR&gt;</td><td></td><td></td><td>10004</td><td>0.880.444.00</td><td><ic></ic></td><td></td></chip>	CTOR>			10004	0.880.444.00	<ic></ic>	
CJ901 CJ902 CJ903 CJ904	1-216-295-91 1-216-295-91	CONDUCTOR,	CHIP CHIP			IC901 IC902 IC903 IC904 IC905	8-759-634-51	IC uPC339C IC NJM2058D	
		<connector></connector>	•			IC906	8-759-279-76	IC MCT7812CT	
CN802 CN805		PLUG, CONNECTAB (CONTACT						<coil></coil>	
CN827 CN851 CN881	* 1-573-963-11 * 1-564-509-11 * 1-573-986-11	PIN, CONNECTO PLUG, CONNECTO PIN, CONNECTO	ÓR (PC BO TOR 6P OR (PC BO	ARD) :	5P	L801 L802 L803 L804	1-406-665-11 1-422-613-11 1-411-286-11	COIL, CHOKE 100UH COIL, CHOKE 100UH COIL, AIR CORE COIL, CHOKE 220UH	
CN884 CN885	* 1-573-964-11 * 1-506-371-00	PIN, CONNECTO PIN, CONNECTO PIN, CONNECTO	OR (PC BO. OR 2P			L901 L902		INDUCTOR 39UH INDUCTOR 39UH	
		PIN, CONNECTO PLUG, CONNEC						<neon lamp=""></neon>	
		<diode></diode>				NL802	1-519-108-99	LAMP, NEON	
D801 D802 D803	8-719-404-46	DIODE RD5.1ES DIODE MA110 DIODE ERC38-0						<transistor></transistor>	
D804 D805	8-719-908-03	DIODE ERC38-0 DIODE GP08D DIODE ERC06-1				Q801 Q802 Q803	8-729-119-80	TRANSISTOR 2SC2688-LK TRANSISTOR 2SC2688-LK TRANSISTOR 2SA1221-L	
D806 D807 D808	8-719-945-80 8-719-500-71	DIODE 1SS133T DIODE ERC06-1 DIODE D8LC40	<b>5S</b>			Q806 Q807	8-729-805-07	TRANSISTOR 2SD1887-CA TRANSISTOR 2SD601A-Q	
D809 D810	8-719-991-33 8-719-945-80	DIODE 1SS133T DIODE ERC06-1	5S			Q808 Q809 Q810	8-729-823-81	TRANSISTOR IRFI640LF TRANSISTOR 2SC4632LS-C TRANSISTOR 2SC2878-AB	B7
D811 D812 D814	8-719-404-46	DIODE EGP20G DIODE MA110 DIODE ERC91-0				Q811 Q813	8-729-823-81	TRANSISTOR 2SC4632LS-C TRANSISTOR 2SA1162-G	B7
D816 D817	8-719-404-46	DIODE MA110 DIODE MA110				Q901 Q902 Q903	8-729-140-93	TRANSISTOR 2SD601A-Q TRANSISTOR 2SB733-34 TRANSISTOR 2SD774-34	



• The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

Les composants identifies par une trame et une marque \(\Lambda\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark riangle are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		Ī	REMARK	.	REF. NO.	PART NO.	DESCRIPTION			EMARK
Q904 Q905		TRANSISTOR 2S TRANSISTOR 2S					R906	1-247-739-11	CARBON	100	5%	1/2W F
Q906 Q907 Q908 Q909 Q910	8-729-231-55 8-729-422-27 8-729-422-27	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	C2878-AB D601A-Q D601A-Q			8 i. 0 P 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	R907 R908 R909 R910 R911	1-216-085-00 1-216-113-00 1-216-059-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	33K 470K 2.7K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
Q911 Q912 Q913 Q914 Q915	8-729-216-22 8-729-029-86 8-729-422-27	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR D' TRANSISTOR 2S TRANSISTOR 2S	A1162-G IC124ESA D601A-Q				R912 R913 R914 R915 R916	1-216-077-00 1-216-049-91 1-216-091-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	15K 1K 56K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
		<resistor></resistor>					R917 R918 R919	1-216-073-00 1-216-077-00	METAL GLAZE METAL GLAZE METAL GLAZE	10K 15K	5% 5% 5%	1/10W 1/10W 1/10W
R800 R801		METAL CHIP METAL GLAZE		0.50% 5%	1/10W 1/10W		R920 R921		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R802 R804 R805	1-249-421-11 1-249-425-11	CARBON	2.2K 4.7K	5% 5% 5%	1/4W 1/4W 1W	F F	R922 R923 R924 R926	1-216-077-00 1-216-067-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	15K 5.6K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R806 R807 <b>R808</b>	1-249-431-11 1-260-325-11		15K 560	5% 5%	1/4W 1/2W 1/4W	F	R927	1-249-377-11		0.47	5%	1/4W F
R809 # R810	1-249-427-11	CARBON	6.8K	5% 5%	1/4W 1/4W 1/4W		R928 R929 R930 R931 R932	1-216-041-00 1-216-081-00 1-216-059-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	470 22K 2.7K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R812 R813 R814 R816	1-216-395-00 1-216-484-00 1-215-919-11	METAL OXIDE METAL OXIDE METAL OXIDE METAL GLAZE	3.3 3.9K 2.2K	5% 5% 5% 5%	3W 3W 3W 1/10W	F F	R933 R934 R935 R936	1-216-081-00 1-216-085-00 1-216-049-91	METAL GLAZE METAL GLAZE METAL GLAZE	22K 33K 1K	5% 5% 5%	1/10W 1/10W 1/10W
R817 R818	1-249-405-11		100	5% 5%	3W 1/4W		R937		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R819 R820 R821	1-215-905-11	METAL GLAZE METAL OXIDE METAL GLAZE	10	5% 5% 5%	1/10W 3W 1/10W	F	R938 R939 R940 R941	1-216-073-00 1-216-083-00	METAL CHIP METAL GLAZE METAL GLAZE METAL GLAZE	27K	0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R822 R823 R825 R826 R830	1-216-041-00 1-215-928-11 1-216-033-00	METAL OXIDE METAL GLAZE METAL OXIDE METAL GLAZE METAL OXIDE	470 68K 220	5% 5% 5% 5% 5%	3W 1/10W 3W 1/10W 3W	F F	R942 R943 R944 R945	1-216-049-91 1-249-377-11 1-216-689-11 1-216-077-00	METAL GLAZE CARBON METAL GLAZE METAL GLAZE	1K 0.47 39K 15K	5% 5% 5%	1/10W 1/4W F 1/10W 1/10W
R831 R832 R836 R837	1-216-049-91 1-202-818-00	METAL OXIDE METAL GLAZE SOLID METAL OXIDE	1K 1K	5% 5% 20% 5%	3W 1/10W 1/2W 1W	F F	R946 R947 R948 R950	1-216-025-91 1-216-051-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 1.2K	5% 5%	1/10W 1/10W
R838 R839	1-247-807-31	CARBON	100 10K	5% 5%	1/4W		R950 R952 R954 R955	1-216-049-91	METAL GLAZE METAL	1K		1/10W 1/10W 1/4W
R841 R843 R844 R846	1-216-491-11 1-202-549-00	METAL OXIDE SOLID METAL OXIDE	56K 100	5% 20% 5% 20%	3W 1/2W 3W 1/2W	F F	R956 R957 R958	1-208-806-11 1-218-754-11	METAL CHIP METAL CHIP METAL CHIP	10K 120K 150K	1% 0.50% 0.50% 0.50%	1/4W 1/10W 1/10W 1/10W
R847 R849		METAL GLAZE		5%	1/10W 1/4W		R959 R960	1-214-757-00		15K	1% 5%	1/4W 1/10W
R850 R851 R852	1-216-081-00 1-216-667-11	METAL GLAZE METAL CHIP METAL CHIP		5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W		R962 R963 R964 R965	1-214-749-00 1-214-757-00		10K 6.8K 15K 100K	0.50% 1% 1% 5%	1/10W 1/4W 1/4W 1/10W
R854 R855 R856 R857 R858	1-208-822-11 1-216-699-11	CARBON METAL CHIP METAL CHIP METAL CHIP METAL CHIP	1 47K 47K 100K 15K	5% 0.50% 0.50% 0.50% 0.50%	1/4W 1/10W 1/10W 1/10W 1/10W	F	R966 R967 R968 R969	1-214-751-00 1-214-731-00	METAL GLAZE METAL METAL	8.2K 1.2K	1% 5% 1% 1%	1/4W 1/10W 1/4W 1/4W
R865 R866		METAL OXIDE FUSE, MICRO (S		5% RY) 3.15	1W SA/125V	F	R970 R971	1-214-757-00 1-216-121-91	METAL GLAZE	15K 1M	1% 5%	1/4W 1/10W
R883 R888 R901	1-216-091-00 1-216-067-00 1-216-065-00	METAL GLAZE METAL GLAZE METAL GLAZE	56K 5.6K 4.7K	5% 5% 5%	1/10W 1/10W 1/10W		R972 R973 R974 R975	1-216-081-00 1-216-699-11	METAL CHIP METAL GLAZE METAL CHIP METAL GLAZE	100K	0.50% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W
R902 R903 R904	1-216-085-00	METAL GLAZE METAL GLAZE METAL GLAZE	33K	5% 5% 5%	1/10W 1/10W		R976	1-216-041-00	METAL GLAZE	470	5%	1/10W
R905	1-247-739-11		100	5%	1/10W 1/2W		R977 R978		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W

The componants identified by shading and mark A are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque \(\Delta\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

 The components identified by in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.





					origina	ally used.		·			
REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R979 R980 R981 R982	1-216-081-00 1-216-073-00 1-216-671-11	METAL GLAZE METAL GLAZE METAL GLAZE METAL CHIP METAL GLAZE	22K	5% 5% 5% 0.50%	1/10W 1/10W 1/10W	C1613 C1615 C1617 C1619 C1620	1-126-968-11 1-104-665-11 1-126-941-11 1-104-665-11 1-126-941-11	ELECT ELECT ELECT	100MF 100MF 470MF 100MF 470MF	20% 20% 20% 20% 20%	50V 25V 25V 25V 25V
R984 R985 R986 R987	1-216-083-00 1-208-812-11 1-216-049-91	METAL GLAZE METAL CHIP METAL GLAZE METAL GLAZE	18 <b>K</b> 1 <b>K</b>	5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W	C1622 C1701 C1702 C1703 C1704	1-163-099-00		18PF	20% 20% 10% 5%	25V 16V 25V 50V 50V
R988 R989 R990 R991 R992	1-216-462-00 1-215-897-11 1-208-801-11	METAL GLAZE METAL OXIDE METAL OXIDE METAL CHIP	8.2K 6.8K 6.2K	5% 5% 0.50%	1/4W 2W F 2W F 1/10W	C1705 C1709 C1723 C1724	1-163-099-00 1-163-031-11 1-163-251-11 1-163-251-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	18PF 0.01MF 100PF 100PF	5% 5% 5%	50V 50V 50V 50V
R993 R994 R995 R996	1-208-814-11	CARBON CARBON METAL CHIP METAL CHIP	15K 15K 100 12K 22K	5% 5% 5% 0.50%	1/4W 1/4W 1/4W 1/10W 1/10W	C1801 C1802 C1803 C1805 C1806	1-163-809-11 1-163-127-00	ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.047MF 270PF	20% 20% 10% 10% 5%	50V 50V 25V 25V 50V
R997 R998 R999	1-216-073-00	METAL GLAZE METAL GLAZE METAL GLAZE <spark gap=""></spark>	10K	5% 5% 5%	1/10W 1/10W 1/10W	C1807 C1808 C1809 C1810 C1811 C1812	1-163-809-11 1-104-661-91 1-104-661-91 1-163-809-11		0.047MF 330MF 330MF 0.047MF	10% 20% 20% 10% 10%	25V 25V 16V 16V 25V 25V
SG801	1-519-422-11	GAP, SPARK				C1012	1-103-609-11	CERAMIC CHIP	0.04/WIF	10%	23 V
T801 A	1-453-189-11	<transforme td="" transformer<=""><td></td><td>YBACK</td><td>221// 15</td><td>C1813 C1814 C1816 C1817 C1818</td><td>1-163-809-11 1-163-251-11 1-163-251-11</td><td>CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP</td><td>0.047MF 100PF 100PF</td><td>5% 10% 5% 5% 10%</td><td>50V 25V 50V 50V 25V</td></transforme>		YBACK	221// 15	C1813 C1814 C1816 C1817 C1818	1-163-809-11 1-163-251-11 1-163-251-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.047MF 100PF 100PF	5% 10% 5% 5% 10%	50V 25V 50V 50V 25V
T803 A	1-427-980-11	TRANSFORMER TRANSFORMER	, FERRITE	NTAL DI (LOT)		C1819 C1820 C1821 C1822 C1823	1-124-902-00	CERAMIC CHIP ELECT CERAMIC CHIP	0.47MF	20% 10% 20% 10% 20%	16V 50V 50V 50V 50V
****	********	*****	******	*****	*****	C1824	1-124-903-11	EI ECT	1ME	20%	50V
ak	4-382-854-11	D BOARD, CO! ***********************************	******** ), P, SW (+)	)		C1825 C1826 C1827 C1828	1-126-967-11 1-126-967-11 1-163-809-11	ELECT	1MF 47MF 47MF 0.047MF 0.047MF	20% 20% 20% 10% 10%	50V 50V 50V 25V 25V
C1502 C1503	1-126-943-11	<pre>SCREW +PSW 33 <capacitor> ELECT CERAMIC CHIP</capacitor></pre>	2200MF	20% 10%	25V 50V	C1829 C1830 C1831 C1832 C1833	1-163-809-11 1-104-661-91 1-104-661-91		0.047MF 330MF 330MF	10% 10% 20% 20% 10%	25V 25V 16V 16V 25V
C1504 C1505 C1506	1-126-943-11 1-136-177-00 1-102-228-00	ELECT FILM	2200MF 1MF 470PF	20% 5% 10%	25V 50V 500V	C1834 C1835 C1836 C1837 C1838	1-163-809-11 1-163-809-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.047MF 0.047MF	10% 10% 10% 10% 20%	25V 25V 25V 16V 50V
C1508 C1509 C1510 C1511	1-163-251-11 1-126-968-11 1-137-401-11 1-137-423-11	CERAMIC CHIP ELECT FILM FILM	100PF 100MF 0.22MF 0.15MF	5% 20% 10% 10%	50V 50V 100V 100V	C1839 C1840 C1841 C1842	1-126-968-11 1-124-903-11 1-126-967-11	ELECT ELECT	100MF 1MF 47MF	20% 20% 20% 20% 5%	50V 50V 50V 50V
C1512 C1513 C1514 C1515 C1516	1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF	10% 5% 5%	100V 50V 50V 50V 50V	C1843 C1844 C1845 C1846 C1847	1-163-251-11 1-126-967-11 1-163-809-11 1-163-809-11	CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP	100PF 47MF 0.047MF 0.047MF	5% 20% 10% 10%	50V 50V 25V 25V
C1517 C1551 C1603 C1604 C1605	1-126-964-11 1-163-251-11 1-163-251-11 1-163-251-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	10MF 100PF 100PF 100PF	5% 20% 5% 5% 5%	50V 50V 50V 50V 50V	C1848 C1849 C1850 C1851 C1852	1-163-809-11 1-126-968-11 1-126-968-11 1-137-399-11 1-126-968-11	ELECT FILM ELECT	0.047MF 100MF 100MF 0.1MF 100MF	10% 10% 20% 5% 20%	25V 25V 50V 50V 50V
C1606 C1607 C1608 C1611 C1612	1-163-251-11		100PF	5% 5% 5% 20% 20%	50V 50V 50V 50V 25V	C1853 C1854 C1855 C1856 C1857	1-137-378-11 1-126-963-11 1-124-903-11 1-104-665-11 1-126-968-11	ELECT ELECT ELECT	0.22MF 4.7MF 1MF 100MF 100MF	5% 20% 20% 20% 20%	50V 50V 50V 25V 50V



Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark  $\triangle$  are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
C1858	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	CJ59	1-216-295-91	CONDUCTOR	, CHIP	
C1859 C1860 C1861 C1862 C1863	1-163-809-11 1-163-809-11 1-126-968-11 1-124-903-11 1-136-173-00	ELECT	0.047MF 0.047MF 100MF 1MF 0.47MF	10% 10% 20% 20% 5%	25V 25V 50V 50V 50V	CJ60 CJ62 CJ63	1-216-295-91	CONDUCTOR CONDUCTOR CONDUCTOR	, CHIP , CHIP	
C1864 C1865 C1866	1-124-903-11 1-124-903-11 1-126-967-11	ELECT	1MF 1MF 47MF	20% 20% 20%	50V 50V 50V	CN1513 CN1612 CN1642	* 1-564-506-11 * 1-564-507-11 * 1-564-507-11	PLUG, CONNE PLUG, CONNE PLUG, CONNE PLUG, CONNE PLUG, CONNE	ECTOR 3P ECTOR 4P ECTOR 4P	
		<chip conduc<="" td=""><td>CTOR&gt;</td><td></td><td></td><td></td><td></td><td>PLUG, CONNE</td><td></td><td></td></chip>	CTOR>					PLUG, CONNE		
CJ1 CJ2 CJ3 CJ4 CJ5	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, (	CHIP CHIP CHIP					PLUG, CONNE PLUG, CONNE <diode></diode>		
CJ6		CONDUCTOR, O				D1501	8-719-908-03	DIODE GP08D	•	
CJ7 CJ8 CJ9 CJ10	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, (CONDUCTOR, CONDUCTOR,	CHIP CHIP CHIP			D1502 D1503 D1505 D1551	8-719-109-89 8-719-971-20 8-719-109-89	DIODE RD5.61 DIODE ERC38 DIODE RD5.61 DIODE MTZJ-	ESB2 3-06 ESB2	
CJ11 CJ12 CJ13 CJ14 CJ15	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR,	CHIP CHIP CHIP			D1552 D1601 D1602 D1603 D1604	8-719-908-03 8-719-908-03 8-719-908-03	DIODE 1SS133 DIODE GP08D DIODE GP08D DIODE GP08D DIODE GP08D		
CJ16 CJ17 CJ18 CJ19	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR,	CHIP CHIP CHIP			D1803 D1812 D1814 D1825	8-719-991-33 8-719-991-33 8-719-991-33	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	3T-77 3T-77 3T-77	•
CJ20		CONDUCTOR, C				D1826		DIODE 1SS133		
CJ21 CJ22 CJ23 CJ24 CJ25	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, (	CHIP CHIP CHIP			D1827 D1931 D1932 D1934 D1935	8-719-924-16 8-719-924-16 8-719-924-16	DIODE MTZJ- DIODE MTZJ- DIODE MTZJ- DIODE MTZJ- DIODE MTZJ-	T-77-24 T-77-24 T-77-24	
CJ26 CJ27 CJ28 CJ29 CJ30	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, (CONDUCTOR, CONDUCTOR,	CHIP CHIP CHIP			D1936 D1937 D1942 D1945 D1946	8-719-924-16 8-719-924-16 8-719-924-16	DIODE MTZJ- DIODE MTZJ- DIODE MTZJ- DIODE MTZJ- DIODE MTZJ-	T-77-24 T-77-24 T-77-24	
CJ31 CJ32 CJ33 CJ34 CJ35	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, (CONDUCTOR, CONDUCTOR,	CHIP CHIP CHIP			D1947 D1948 D1949 D1951 D1953	8-719-921-86 8-719-924-16 8-719-921-86	DIODE MTZJ- DIODE MTZJ- DIODE MTZJ- DIODE MTZJ- DIODE MTZJ-	13 T-77-24 13	
CJ36 CJ37		CONDUCTOR,				D1954	8-719-921-86	DIODE MTZJ-	13	
CJ38 CJ39	1-216-295-91	CONDUCTOR, (CONDUCTOR, CONDUCTOR,	CHIP					<fuse></fuse>		
CJ40		CONDUCTOR, O				F1601	Δ 1-532-745-11		TUBE 3.15A/125V	
CJ42 CJ43 CJ44 CJ45 CJ46	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, (CONDUCTOR, CONDUCTOR,	CHIP CHIP CHIP			F1602	<u> </u>	CLIP, FUSE ; I	TUBE 3.15A/125V	
CJ47		CONDUCTOR, CONDUCTOR				TOTEO	9 750 100 51	<ic></ic>		
CJ48 CJ49 CJ50 CJ51	1-216-295-91 1-216-295-91	CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, ( CONDUCTOR, (	CHIP CHIP			IC1501 IC1601 IC1602 IC1701 IC1702	8-749-010-88	IC STK392-010 IC STK392-010 IC CXP85112B	)	
CJ52 CJ53		CONDUCTOR,				IC1702		IC PM0002B		
CJ54 CJ56 CJ57	1-216-295-91 1-216-295-91	CONDUCTOR,	CHIP CHIP			IC1802 IC1803 IC1804 IC1805	8-759-327-51 8-759-012-67 8-759-231-53	IC PA0053B IC MC7905CT IC TA7805S		
CJ58	1-216-295-91	CONDUCTOR, O	CHIP			1003	§8-759-327-52	IC F MUUUZB		

The componants identified by shading and mark  $\Delta$  are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



		Picco port		<b></b>							
REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		R	REMARK
IC1806 IC1807 IC1808 IC1809 IC1931	8-759-279-76 8-759-327-52	IC LM7912CT IC MCT7812CT				R1613 R1615 R1616 R1618	1-214-673-00 1-214-673-00 1-214-673-00 1-214-673-00	METAL METAL METAL	4.7 4.7 4.7 4.7	1% 1% 1% 1%	1/4W 1/4W 1/4W 1/4W
IC1932	8-759-711-28	IC NJM2058D				R1619 R1620 R1621 R1622	1-214-673-00 1-214-673-00 1-214-673-00 1-214-673-00	METAL METAL METAL	4.7 4.7 4.7 4.7	1% 1% 1% 1%	1/4W 1/4W 1/4W 1/4W
		<coil></coil>				R1623	1-214-729-00		1K	1%	1/4W
L1501 L1502 L1503 L1515 L1516	1-412-533-21 1-412-524-11 1-410-470-11	INDUCTOR 47UI INDUCTOR 47UI INDUCTOR 8.2U INDUCTOR 10UI INDUCTOR 100U	H H H			R1624 R1625 R1626 R1627 R1628	1-214-729-00 1-214-673-00 1-214-673-00 1-214-673-00 1-214-673-00	METAL METAL METAL	1K 4.7 4.7 4.7 4.7	1% 1% 1% 1% 1%	1/4W 1/4W 1/4W 1/4W 1/4W
L1701 L1801 L1802	1-406-975-21	INDUCTOR 10UI COIL, CHOKE 47 COIL, CHOKE 47	/UH			R1629 R1630 R1631 R1632 R1633	1-214-673-00 1-214-673-00 1-214-729-00 1-214-673-00 1-214-673-00	METAL METAL METAL	4.7 4.7 1K 4.7 4.7	1% 1% 1% 1%	1/4W 1/4W 1/4W 1/4W 1/4W
		<transistor></transistor>				R1634	1-214-729-00				
Q1501 Q1502 Q1551 Q1552 Q1701	8-729-422-27 8-729-216-22 8-729-422-27	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S	D601A-Q A1162-G D601A-Q			R1635 R1636 R1637 R1638	1-214-673-00 1-214-673-00 1-214-673-00 1-214-673-00	METAL METAL METAL METAL	1K 4.7 4.7 4.7 4.7	1% 1% 1% 1%	1/4W 1/4W 1/4W 1/4W 1/4W
Q1801 Q1802 Q1803 Q1804 Q1805	8-729-216-22 8-729-029-86 8-729-422-27	TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR D TRANSISTOR 2S TRANSISTOR D	A1162-G IC124ESA D601A-Q			R1639 R1640 R1641 R1642 R1717	1-214-673-00 1-214-673-00 1-214-673-00 1-214-673-00 1-216-033-00	METAL METAL	4.7 4.7 4.7 4.7 220	1% 1% 1% 1% 5%	1/4W 1/4W 1/4W 1/4W 1/10W
						R1721 R1737		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1501	1.216.040.01	<resistor> METAL GLAZE</resistor>	1 <b>V</b>	5%	1/10W	R1740 R1748 R1749	1-216-025-91 1-216-033-00	METAL GLAZE METAL GLAZE	100 220	5% 5%	1/10W 1/10W
R1502 R1504 R1505 R1506	1-208-814-11 1-216-081-00 1-216-085-00		22K 22K 33K	0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1751 R1752 R1753 R1760	1-216-081-00 1-216-073-00 1-216-295-91	METAL GLAZE METAL GLAZE CONDUCTOR, C	22K 10K CHIP	5% 5%	1/10W 1/10W
R1507 R1508	1-216-057-00	METAL CHIP METAL GLAZE		0.50% 5%	1/10W 1/10W	R1788		CONDUCTOR, C METAL CHIP	10K	0.50%	1/10W
R1509 . R1510	1-249-383-91 1-214-671-11	CARBON METAL	1.5 3.9	5% 1%	1/4W F 1/4W	R1801 R1802		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1511	1-214-671-11			1%	1/4W	R1803 R1804	1-216-073-00	METAL GLAZE METAL GLAZE	10K	5% 5%	1/10W 1/10W
R1512 R1513 R1514	1-214-671-11 1-216-632-11	METAL CHIP	150 3.9 160	5% 1% 0.50%	3W F 1/4W 1/10W		1-216-069-00	METAL GLAZE METAL GLAZE	6.8K	5% 5%	1/10W 1/10W
R1515 R1516	1-216-639-11 1-214-671-11	METAL CHIP METAL	330 3.9	0.50% 1%	1/10W 1/4W	R1807 R1808		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1517	1-216-647-11	METAL CHIP	680	0.50%	1/10W	R1809 R1810	1-216-081-00	METAL GLAZE METAL GLAZE	22K	5% 5%	1/10W 1/10W
R1518 R1519	1-216-665-11 1-249-385-91	METAL CHIP CARBON		0.50% 5%	1/10W 1/4W F	R1811		METAL GLAZE		5%	1/10W
	1.1-249-385-91		2.2	5% 5%	1/4W F 1/10W		1-216-097-91	METAL GLAZE METAL GLAZE	100K	5% 5%	1/10W 1/10W
R1522 R1523	1-216-049-91	METAL GLAZE METAL GLAZE	1K	5% 5%	1/10W 1/10W	R1814 R1815	1-216-699-11	METAL CHIP METAL CHIP	100K 82K	0.50% 0.50%	1/10W 1/10W
R1551 R1552 R1553	1-216-063-91	METAL GLAZE	3.9K	5% 5%	1/10W 1/10W	R1816 R1817	1-216-033-00	METAL GLAZE METAL GLAZE	220	5% 5%	1/10W 1/10W
R1553 R1554		METAL GLAZE		5%	1/10W	R1818 R1819 R1820	1-216-025-91	METAL GLAZE	100	5% 5%	1/10W 1/10W
R1559	1-216-073-00	METAL GLAZE	10K	5% 5%	1/10W 1/10W			METAL GLAZE		5%	1/10W
R1562 R1603	1-216-663-11	METAL CHIP	3.3K	5% 0.50%	1/10W 1/10W	R1821 R1823	1-208-811-11	METAL GLAZE METAL CHIP	16K	5% 0.50%	1/10W 1/10W
R1604			3.3K	0.50%	1/10W	R1824 R1825	1-216-685-11	METAL CHIP	27K 27K	0.50% 0.50%	1/10W 1/10W
R1605 R1606	1-216-663-11		3.3K 3.3K	0.50%	1/10W 1/10W	R1826		METAL CHIP	27K	0.50%	1/10W
R1607 R1608	1-216-663-11		3.3K	0.50% 0.50%	1/10W 1/10W	R1827 R1828	1-216-685-11	METAL CHIP METAL CHIP	27K 27K	0.50% 0.50%	1/10W 1/10W
R1610	1-214-729-00		1K	1%	1/4W	R1829 R1830	1-216-025-91	METAL CHIP METAL GLAZE		0.50% 5%	1/10W 1/10W
R1612	1-214-729-00	METAL	1K	1%	1/4W	R1831	1-216-049-91	METAL GLAZE	1 <b>K</b>	5%	1/10W



Les composants identifies par une trame et une marque 🛕 sont critiques pour la securite.
Ne les remplacer que par une
piece portant le numero specifie.

The componants identified by shading and mark  $\triangle$  are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		R	EMARK :	REF. NO.	PART NO.	DESCRIPTION	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		EMARK
R1832	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	R1903	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1833 R1834		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1904		METAL GLAZE		5%	1/10W
R1835 R1836		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1905 R1907		METAL GLAZE METAL CHIP	100K 15K	5% 0.50%	1/10W 1/10W
						R1908	1-208-814-11	METAL CHIP	22K	0.50%	1/10W
R1837 R1838		METAL CHIP METAL CHIP		0.50% 0.50%	1/10W 1/10W	R1909	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1839 R1840		METAL GLAZE METAL CHIP		5% 0.50%	1/10W 1/10W	R1910 R1911		METAL CHIP METAL CHIP	27K 27K	0.50% 0.50%	1/10W 1/10W
R1841		METAL CHIP			1/10W	R1912	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1842		METAL GLAZE		5%	1/10W	R1913 R1914		METAL CHIP METAL CHIP	27K 27K	0.50% 0.50%	1/10W 1/10W
R1843 R1844		METAL CHIP METAL GLAZE		0.50% 5%	1/10W 1/10W	R1915	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1845 R1846		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1916 R1917		METAL GLAZE METAL CHIP	100 10K	5% 0.50%	1/10W 1/10W
R1847		METAL CHIP		0.50%	1/10W	R1918 R1919	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1848	1-216-077-00	METAL GLAZE	15K	5%	1/10W			METAL CHIP	47K	0.50%	1/10W
R1849 R1850		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1920 R1923		METAL CHIP METAL CHIP	4.7K 12K	0.50% 0.50%	1/10W 1/10W
R1851	1-216-043-91	METAL GLAZE	560	5%	1/10W	R1925 R1926		METAL GLAZE METAL CHIP	180 10K	5% 0.50%	1/10W 1/10W
R1852 R1853		METAL GLAZE METAL GLAZE		5%	1/10W	R1927		METAL GLAZE		5%	1/10W
R1854	1-216-025-91	METAL GLAZE	100	5% 5%	1/10W 1/10W	R1928		METAL CHIP	10K	0.50%	1/10W
R1855 R1856		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	R1931 R1935	1-216-698-11 1-218-766-11	METAL CHIP METAL CHIP	91K 390K	0.50% 0.50%	1/10W 1/10W
R1857	1-216-033-00	METAL GLAZE	220	5%	1/10W	R1937 R1938		METAL CHIP METAL CHIP	10K 15K	0.50% 0.50%	1/10W 1/10W
R1858 R1859	1-216-097-91	METAL GLAZE METAL GLAZE	100K	5%	1/10W						
R1860	1-216-025-91	METAL GLAZE	100	5% 5%	1/10W 1/10W	R1940 R1941	1-208-806-11	METAL CHIP METAL CHIP	18 <b>K</b> 10 <b>K</b>	0.50% 0.50%	1/10W 1/10W
R1861	1-210-473-11	METAL OXIDE	56	5%	3W F	R1942 R1943		METAL CHIP METAL CHIP	10K 100K	0.50% 0.50%	1/10W 1/10W
R1862 R1863		METAL OXIDE METAL GLAZE		5% 5%	3W F   1/10W	R1944	1-208-806-11	METAL CHIP	10 <b>K</b>	0.50%	1/10W
R1864 R1865	1-216-025-91	METAL GLAZE METAL OXIDE	100	5% 5%	1/10W 3W F	R1947		METAL GLAZE		5%	1/10W
R1866		METAL OXIDE		5%	3W F	R1948 R1949	1-216-659-11	METAL GLAZE METAL CHIP	2.2K	5% 0.50%	1/10W 1/10W
R1868	1-216-025-91	METAL GLAZE	100	5%	1/10W	R1950 R1951		METAL CHIP METAL CHIP	2.2K 10K	0.50% 0.50%	1/10W 1/10W
R1869 R1870		METAL CHIP METAL CHIP		0.50% 0.50%	1/10W 1/10W	R1952	1-208-806-11	METAL CHIP	10 <b>K</b>	0.50%	1/10W
R1871 R1872	1-216-685-11	METAL CHIP METAL CHIP	27K	0.50% 0.50%	1/10W 1/10W	R1954 R1955	1-208-806-11	METAL CHIP METAL CHIP	10K 10K	0.50%	1/10W 1/10W
R1873						R1956	1-208-800-11	METAL CHIP	5.6K	0.50%	1/10W
R1874	1-216-685-11	METAL CHIP	27K	0.50% 0.50%	1/10W 1/10W	R1957		METAL CHIP	56K	0.50%	1/10W
R1875 R1876		METAL CHIP METAL GLAZE	100	5%	1/10W 1/10W	R1958 R1959		METAL CHIP METAL CHIP	5.6K 56K	0.50% 0.50%	1/10W 1/10W
R1877	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R1960 R1961		METAL CHIP METAL CHIP	10 <b>K</b> 10 <b>K</b>	0.50% 0.50%	1/10W 1/10W
R1878 R1879		METAL CHIP METAL CHIP		0.50% 0.50%	1/10W 1/10W	R1962		METAL GLAZE		5%	1/10W
R1880	1-218-768-11	METAL CHIP	470K	0.50%	1/10W	R1963		METAL GLAZE		5%	1/10W
R1881 R1883		CONDUCTOR, C METAL CHIP		0.50%	1/10W	R1964 R1965		METAL GLAZE METAL GLAZE		5% 5%	1/10 <b>W</b> 1/10 <b>W</b>
R1884	1-208-806-11	METAL CHIP	10 <b>K</b>	0.50%	1/10W	R1966 R1967		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
R1885 R1886	1-216-049-91	METAL GLAZE METAL GLAZE	1 K	5% 5%	1/10W 1/10W	R1970		METAL CHIP	470	0.50%	1/10W
R1887	1-208-806-11	METAL CHIP	10 <b>K</b>	0.50%	1/10W	R1971	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1888		METAL CHIP		0.50%	1/10W	R1972 R1981	1-216-473-11	METAL GLAZE METAL OXIDE	56	5% 5%	1/10W 3W F
R1889 R1890		METAL CHIP METAL GLAZE		0.50% 5%	1/10W 1/10W	R1982	1-216-473-11	METAL OXIDE	56	5%	3W F
R1891 R1892		METAL CHIP METAL GLAZE	10K	0.50% 5%	1/10W 1/10W	R1983 R1984		METAL GLAZE METAL GLAZE		5% 5%	1/10W
R1893		METAL GLAZE		5%	1/10W	R1985		METAL GLAZE		5%	1/10W 1/10W
	<u>1-249-389-91</u>			5%	1/4W F						
	<u> 1-249-389-91</u>		4.7	5% <b>5%</b>	1/10W 1/4W F			<thermistor< td=""><td>&gt;</td><td></td><td></td></thermistor<>	>		
R1897 R1898		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W	TH1501 TH1801		THERMISTOR THERMISTOR			
R1899		METAL GLAZE		5%	1/10W						
R1900 R1901	1-216-033-00	METAL GLAZE METAL GLAZE	220	5% 5%	1/10W 1/10W			<crystal></crystal>			
R1902		METAL GLAZE		5% 5%	1/10W 1/10W	X1701	1-579-917-11	VIBRATOR, CR	YSTAL		







REF. NO. PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
*******	*******	******	*****	******	R1312	1-247-804-11	CARBON	75	5%	1/4W
* A-1372-111-	A HB BOARD, C			V35/53V35)	R1314	1-247-807-31	CARBON	100	5%	1/4W (KP-61V35)
	*****	******	*	ĺ						( 01 100)
							<switch></switch>			
	<capacitor></capacitor>				S1301		SWITCH, TACT			
C1351 1-124-261-00	ELECT	10MF	20%	50V	\$1302 \$1303	1-571-731-11	SWITCH, TACT SWITCH, TACT	IL		
					S1304 S1305		SWITCH, TACT SWITCH, TACT			
	<connector:< td=""><td>&gt;</td><td></td><td></td><td>S1306</td><td>1-571-731-11</td><td>SWITCH, TACT</td><td>π.</td><td></td><td></td></connector:<>	>			S1306	1-571-731-11	SWITCH, TACT	π.		
CN1389 *1-564-518-11	PLUG, CONNEC	CTOR 3P			S1307		SWITCH, TACT			
	<ic></ic>									
IC1351 8-747-905-11		ELEVEN	er onsza	700 51	******	****	******	*****	: 1/4: 1/4: 1/4: 1/4: 1/4:	****
101551 8-747-905-11	RAY CATCHER	ELEMEN	II SBX I	790-51		* A-1373-559-A	U BOARD, CO			
	<resistor></resistor>						******	*****		
R1352 1-247-807-31	CARBON	100	5%	1/4W						
							<capacitor></capacitor>			
***************************************	******	*****	ak ak ak ak ak ak ak	*******	C1101 C1102	1-126-965-11 1-124-903-11		22MF 1MF	20%	50V
					C1103	1-124-903-11	ELECT	1MF	20% 20%	50V 50V
* A-13/2-099-	A HA BOARD, C			(V35)	C1104 C1105	1-163-031-11 1-126-965-11	CERAMIC CHIP ELECT	0.01MF 22MF	20%	50V 50V
* A-1372-112-	A HA BOARD, C			V35/53V35)	C1106	1-126-965-11	ELECT	22MF	20%	50V
	**************************************	*****	*		C1107 C1108	1-124-903-11 1-124-903-11		1MF 1MF	20% 20%	50V 50V
					C1109 C1110	1-126-965-11 1-124-903-11	ELECT	22MF 1MF	20% 20%	50V 50V
	<capacitor></capacitor>				C1111	1-124-903-11		1MF	20%	50V
C1301 1-126-964-11 C1304 1-126-964-11		10MF	20%	50V	C1121	1-126-935-11	ELECT	470MF	20%	16V
C1304 1-120-904-11	ELECT	10MF	20%	50V (KP-61V35)		1-124-903-11		1MF	5% 20%	50V 50V
					C1124	1-126-965-11	ELECT	22MF	20%	50V
	<connector:< td=""><td>&gt;</td><td></td><td></td><td>C1125 C1126</td><td>1-124-903-11 1-104-665-11</td><td></td><td>1MF 100MF</td><td>20% 20%</td><td>50V 25V</td></connector:<>	>			C1125 C1126	1-124-903-11 1-104-665-11		1MF 100MF	20% 20%	50V 25V
CN1346 1-564-524-11 CN1347 *1-564-521-11					C1127 C1128	1-104-663-11	ELECT CERAMIC CHIP	33MF	20% 5%	25V 50V
CN1349 *1-564-518-11			KP-46V3	35/53V35)	C1129	1-126-965-11		22MF	20%	50V
	<diode></diode>				C1130	1-109-889-11 1-109-889-11		1MF	20%	50V
D1304 8-719-053-43		11/OTO 1			C1131 C1132	1-124-902-00	ELECT	1MF 0.47MF	20% 20%	50V 50V
	DIODE SLR-325 DIODE SLR-325				C1136 C1137	1-126-965-11 1-164-232-11	CERAMIC CHIP	22MF 0.01MF	20% 10%	50V 50V
					C1138	1-124-902-00		0.47MF	20%	50V
	<ic></ic>				C1139 C1145	1-126-964-11 1-128-499-11		10MF 220MF	20% 20%	50V 16V
IC1301 8-741-780-51	IC SBX1780-51	(KP-61V3:	5)		C1146 C1147	1-124-902-00 1-124-902-00	ELECT	0.47MF 0.47MF	20% 20%	50V 50V
	<jack></jack>				C1148	1-124-902-00		0.47MF	20%	50V
J1301 1-750-517-11	JACK BLOCK, I	DIN 2D			C1149	1-124-902-00	ELECT	0.47MF	20%	50V
J1301 1-/30-31/-11	JACK BLUCK, I	rin sp			C1150 C1151	1-128-499-11 1-128-499-11	ELECT	220MF 220MF	20% 20%	16V 16V
	<resistor></resistor>				C1152	1-128-499-11	ELECT	220MF	20%	16V
R1302 1-249-416-11	CARBON	820	5%	1/4W	C1153	1-104-665-11	ELECT	100MF	20%	25V
R1303 1-249-417-11 R1304 1-249-425-11	CARBON	1K 4.7K	5% 5%	1/4W 1/4W			<chip conduc<="" td=""><td>TOP~</td><td></td><td></td></chip>	TOP~		
R1305 1-249-411-11	CARBON	330	5%	1/4W	G11100	1 01/ 00/ 01				
		330	5%	1/4W	CJ1102	1-210-293-91	CONDUCTOR, O	LHIP		
R1307 1-249-420-11 R1308 1-247-895-91	CARBON	1.8K 470K	5% 5%	1/4W 1/4W			<connector:< td=""><td>•</td><td></td><td></td></connector:<>	•		
R1309 1-247-895-91 R1310 1-249-429-11	CARBON	470 <b>K</b> 10 <b>K</b>	5% 5%	1/4W 1/4W	CN1147	* 1-564-509-11	PLUG, CONNEC	TOR 6P		
R1311 1-247-815-91	CARBON	220	5%	1/4W	CN1150	1-573-300-21	CONNECTOR, F	BOARD TO	BOAR	D 18P
					1	- JJD 740 II	2011201 OK ()			



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION		į	REMARK
		CONNECTOR, HINGE (TAB) 18P PLUG, CONNECTOR 12P	,	Q1107 Q1108 Q1109	8-729-422-27	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25	SD601A-Q		
CN1194	1-573-299-21	CONNECTOR, BOARD TO BOAR	RD 10P	Q1110 Q1111	8-729-216-22	TRANSISTOR 25 TRANSISTOR 25	SA1162-G		
		<diode></diode>		Q1112 Q1113	8-729-422-27	TRANSISTOR 25 TRANSISTOR 25	D601A-Q		
D1101 D1102 D1103 D1104	8-719-110-17 8-719-110-17 8-719-110-17	DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2		Q1114 Q1115	8-729-422-27	TRANSISTOR 25	SD601A-O		
D1105		DIODE RD10ESB2				<resistor></resistor>			
D1106 D1107 D1108 D1109 D1111	8-719-110-17 8-719-110-17 8-719-110-17	DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2		R1101 R1102 R1103 R1104 R1105	1-216-065-00 1-247-804-11	METAL GLAZE	4.7K 75	5% 5% 5% 5% 5%	1/10W 1/10W 1/4W 1/10W 1/4W
D1112 D1113 D1114 D1115	8-719-110-17 8-719-110-17	DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2		R1106 R1107 R1108 R1109	1-216-065-00	CARBON METAL GLAZE METAL GLAZE METAL GLAZE	4.7K	5% 5% 5% 5%	1/4W 1/10W 1/10W 1/10W
D1116		DIODE RD10ESB2		R1110		METAL GLAZE		5%	1/10W
D1117 D1118 D1120 D1121 D1122	8-719-110-17 8-719-110-17 8-719-921-86	DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2 DIODE MTZJ-13 DIODE MTZJ-13	1	R1111 R1112 R1113 R1114 R1115	1-216-065-00 1-247-804-11 1-216-113-00	METAL GLAZE METAL GLAZE CARBON METAL GLAZE METAL GLAZE	4.7K 75 470K	5% 5% 5% 5%	1/10W 1/10W 1/4W 1/10W 1/10W
D1123		DIODE MTZJ-13		R1116		METAL GLAZE		5%	1/10W
D1124 D1125 D1128 D1129	8-719-981-99 8-719-924-11	DIODE MTZJ-13 DIODE MTZJ-T-77-3.3 DIODE MTZJ-T-77-22 DIODE MTZJ-T-77-22		R1117 R1118 R1119 R1120	1-216-095-00 1-216-025-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	82K 100	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
D1130 D1131		DIODE MTZJ-T-77-22 DIODE MTZJ-T-77-22		R1127 R1129		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
D1132 D1133 D1134	8-719-110-17 8-719-110-17	DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2		R1130 R1132 R1133	1-216-067-00 1-216-025-91	METAL GLAZE METAL GLAZE METAL GLAZE	5.6K 100	5% 5% 5%	1/10W 1/10W 1/10W
D1135	8-719-991-33	DIODE 1SS133T-77		R1134 R1135 R1137	1-216-065-00	METAL GLAZE METAL GLAZE METAL GLAZE	4.7K	5% 5% 5%	1/10W 1/10W 1/10W
		<ic></ic>		R1138 R1140		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
IC1101 IC1102 IC1102	8-759-701-59	IC CXA1855S IC NJM78M09FA IC NJM78M09FA		R1141 R1142 R1145 R1146	1-216-025-91 1-216-051-00 1-216-051-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 1.2K 1.2K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
	4 === === == ==	<jack></jack>		R1149		METAL GLAZE		5%	1/10W
J1101 J1102 J1103 J1104 J1105	1-750-517-11 1-750-545-11 1-750-517-11	TERMINAL BLOCK, S 3P JACK BLOCK, PIN 3P JACK BLOCK, PIN 3P JACK BLOCK, PIN 3P JACK BLOCK, PIN 2P		R1150 R1151 R1152 R1153 R1154	1-216-025-91 1-216-043-91 1-216-049-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 560 1K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
J1108 J1109 J1110	1-563-760-11	JACK, MINIATUER (DIA. 3.5) JACK, MINIATUER (DIA. 3.5) JACK, MINIATUER (DIA. 3.5)		R1155 R1156 R1157 R1158 R1159	1-216-043-91 1-216-045-00 1-216-043-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	560 680 560	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
		<coil></coil>		R1160		METAL GLAZE		5%	1/10W
L1101 L1104 L1105	1-410-473-11	INDUCTOR 33UH INDUCTOR 18UH INDUCTOR 1mH		R1161 R1162 R1165 R1166	1-216-041-00 1-216-041-00 1-249-403-11	METAL GLAZE METAL GLAZE	470 470 68	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/4W 1/10W
		<transistor></transistor>		R1167 R1168		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W
Q1102 Q1103 Q1104	8-729-216-22 8-729-422-27	TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-Q		R1169 R1170 R1171	1-216-025-91 1-216-041-00	METAL GLAZE METAL GLAZE METAL GLAZE	100 470	5% 5% 5%	1/10W 1/10W 1/10W
Q1105 Q1106		TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G		R1172 R1173		METAL GLAZE METAL GLAZE		5% 5%	1/10W 1/10W





REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R1174 R1175 R1176	1-216-025-91	METAL GLAZE METAL GLAZE METAL GLAZE	100	5% 5% 5%	1/10W 1/10W 1/10W	C1271 C1272 C1273	1-126-964-11 1-126-964-11 1-126-933-11	ELECT	10MF 10MF 100MF	20% 20% 20%	50V 50V 16V
R1178 R1179 R1180 R1181 R1182	1-216-025-91 1-216-025-91 1-216-097-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 100 100 <b>K</b>	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	C1274 C1275 C1276 C1278 C1279	1-102-121-00 1-126-967-11 1-126-967-11 1-102-121-00 1-136-502-11	ELECT ELECT CERAMIC	0.0022MF 47MF 47MF 0.0022MF 0.33MF	20% 20%	50V 16V 16V 50V 50V
R1183 R1184 R1185 R1186 R1187	1-216-113-00 1-216-049-91 1-216-061-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	470K 1K 3.3K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	C1280 C1281 C1282 C1283 C1284	1-126-967-11 1-124-903-11 1-130-499-00 1-136-502-11 1-126-964-11	ELECT MYLAR MYLAR	47MF 1MF 0.22MF 0.33MF 10MF	20% 20% 5% 5% 20%	16V 50V 50V 50V 50V
R1188 R1193 R1194 R1195 R1196	1-216-025-91 1-216-025-91 1-216-025-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	100 100 100	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	C1285 C1286 C1287 C1289 C1290	1-130-493-00 1-136-165-00 1-126-963-11 1-126-967-11 1-128-550-11	FILM ELECT ELECT	0.068MF 0.1MF 4.7MF 47MF 2200MF	5% 5% 20% 20% 20%	50V 50V 50V 50V 50V
R1197 R1238 R1239 R1240	1-216-049-91 1-216-049-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	1K 1K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	C1291 C1292 C1293 C1294 C1295	1-128-550-11 1-126-964-11 1-104-665-11 1-126-965-11 1-124-925-11	ELECT ELECT ELECT	2200MF 10MF 100MF 22MF 2,2MF	20% 20% 20% 20% 20%	50V 50V 25V 50V 50V
TD 1101	1 507 710 11	<terminal bo<="" td=""><td></td><td></td><td></td><td>C1296 C1297</td><td>1-126-964-11 1-126-964-11</td><td></td><td>10MF 10MF</td><td>20% 20%</td><td>50V 50V</td></terminal>				C1296 C1297	1-126-964-11 1-126-964-11		10MF 10MF	20% 20%	50V 50V
TB1101	1-33/-/12-11	TERMINAL, PU	SH					<connector></connector>			
**************************************						CN1209 *1-564-507-11 PLUG, CONNECTOR 4P CN1210 *1-573-963-11 PIN, CONNECTOR (PC BOARD) 3P CN1230 1-695-915-11 TAB (CONTACT) CN1270 *1-564-512-11 PLUG, CONNECTOR 9P CN1271 *1-691-134-11 PIN, CONNECTOR (PC BOARD) 2P					
		<capacitor></capacitor>						<diode></diode>			
C1204 C1205 C1208 C1209 C1210	1-104-759-11 1-104-759-11 1-164-625-11 1-164-625-11 1-136-173-00	ELECT ELECT CERAMIC CERAMIC	470MF 470MF 680PF 680PF 0.47MF	20% 20% 10% 10% 5%	200V 200V 500V 500V 50V	D1201 D1205 D1207 D1209 D1211	8-719-991-33 8-719-991-33 8-719-991-33	DIODE LN4SB60 DIODE 1SS133T DIODE 1SS133T DIODE 1SS133T DIODE 1SS133T	-77 -77 -77		
C1211 C1212 C1213 C1214 C1215	1-136-169-00 1-136-173-00 1-136-169-00 1-164-625-11 1-129-719-00	FILM FILM CERAMIC	0.22MF 0.47MF 0.22MF 680PF 0.027MF	5% 5% 5% 10% 5%	50V 50V 50V 500V 630V	D1214 D1215 D1230 D1231 D1232	8-719-160-81 8-719-988-31 8-719-510-09 8-719-991-33	DIODE RD27FB2 DIODE RD27FB2 DIODE D10SC6N DIODE D10SC6N DIODE 1SS133T	2 MR M M		
C1230 C1231 C1232 C1233 C1234	1-136-153-00 1-128-548-11 1-128-548-11 1-136-153-00 1-126-965-11	ELECT ELECT FILM	0.01MF 4700MF 4700MF 0.01MF 22MF	5% 20% 20% 5% 20%	50V 25V 25V 50V 50V	D1233 D1234 D1235 D1251 D1252	8-719-110-60 8-719-921-80 8-719-991-33 8-719-991-33	DIODE 1SS133T DIODE RD24ESI DIODE MTZJ-11 DIODE 1SS133T DIODE 1SS133T	B B -77 -77		
C1251 C1252 C1253 C1254 C1255	1-101-888-00 1-102-971-00 1-101-006-00 1-102-127-00 1-102-978-00	CERAMIC CERAMIC CERAMIC	68PF 82PF 0.047MF 0.0068MF 220PF	5% 5% 10% 5%	50V 50V 50V 50V 50V	D1253 D1260 D1261 D1270 D1271	8-719-991-33 8-719-991-33 8-719-991-33	DIODE 1SS133T DIODE 1SS133T DIODE 1SS133T DIODE 1SS133T DIODE 1SS133T	-77 -77 -77		
C1256 C1257 C1258 C1259 C1260	1-102-978-00 1-104-665-11 1-126-964-11 1-124-903-11 1-104-665-11	ELECT ELECT ELECT	220PF 100MF 10MF 1MF 100MF	5% 20% 20% 20% 20%	50V 25V 50V 50V 25V	D1272 D1273 D1274 D1275 D1276	8-719-924-11 8-719-924-11 8-719-991-33	DIODE 1SS133T DIODE MTZJ-T- DIODE MTZJ-T- DIODE 1SS133T DIODE 1SS133T	77-22 77-22 -77		
C1261 C1262 C1263 C1266 C1267	1-104-665-11 1-137-399-11 1-102-978-00 1-101-002-00	FILM CERAMIC CERAMIC	100MF 0.1MF 220PF 0.0022MF	20% 5% 5%	25V 50V 50V 50V	D1277 D1278		DIODE 1SS133T DIODE 1SS133T <ic></ic>			
C1267 C1268 C1270	1-126-967-11 1-126-964-11 1-126-964-11	ELECT	47MF 10MF 10MF	20% 20% 20%	16V 50V 50V	IC1230 IC1270 IC1271	8-759-420-19 8-759-135-80 8-759-135-80	IC uPC358C			



Les composants identifies par une trame et une marque  $\Delta$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark  $\triangle$  are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		R	EMARK	; F	REF. NO.	PART NO.	DESCRIPTION		1	REMARK
IC1272		IC MM1124AD		***	***********		R1259	1-247-863-91	CARBON	22K	5%	1/4W
IC1273	8-759-135-80						R1260	1-249-430-11		12 <b>K</b>	5%	1/4W
IC1274 IC1275	8-759-072-99 8-759-905-71						R1261 R1262	1-247-807-31 1-249-417-11		100 1 <b>K</b>	5% 5%	1/4W 1/4W
							R1263 R1264	1-249-429-11 1-249-417-11		10K 1K	5% 5%	1/4W 1/4W
		<coil></coil>					R1265	1-249-429-11		10K	5%	1/4W
L1251 L1252		INDUCTOR 2.2U INDUCTOR 2.2U					R1266 R1267	1-249-429-11 1-249-429-11	CARBON	10K 10K	5% 5%	1/4W 1/4W
LILDE	1-414-150-11	111DOCTOR 2.20	, ii				R1268 R1269	1-247-863-91	CARBON	22K 1K	5%	1/4W
		<transistor></transistor>	•			1		1-249-417-11			5%	1/4W
Q1201		TRANSISTOR 2					R1270 R1271	1-249-425-11 1-249-425-11	CARBON	4.7K 4.7K	5% 5%	1/4W 1/4W
Q1202 Q1230	8-729-119-76	TRANSISTOR 25	SA1175-HI				R1272 R1273	1-249-429-11 1-249-429-11	CARBON	10K 10K	5% 5%	1/4W 1/4W
Q1231 Q1232		TRANSISTOR 25					R1275	1-249-429-11		10 <b>K</b>	5%	1/4W
Q1233	8-729-119-78	TRANSISTOR 2	SC2785-HI	E			R1276 R1277	1-249-429-11 1-249-429-11		10 <b>K</b> 10 <b>K</b>	5% 5%	1/4W 1/4W
Q1260 Q1261		TRANSISTOR 25					R1279 R1280	1-249-437-11 1-249-416-11		47 <b>K</b> 820	5% 5%	1/4W 1/4W
Q1262 Q1263	8-729-119-76	TRANSISTOR 25	SA1175-HI	FE			R1281	1-249-437-11		47K	5%	1/4W
Q1270		TRANSISTOR 25					R1282 R1283	1-249-417-11 1-247-863-91		1K 22K	5% 5%	1/4W 1/4W
Q1271 Q1272	8-729-927-14	TRANSISTOR D	TC323TS				R1284 R1285	1-249-415-11	CARBON	680	5%	1/4W
Q1273	8-729-119-78	TRANSISTOR 25	SC2785-HE	E			R1286	1-249-431-11 1-249-421-11		15K 2.2K	5% 5%	1/4W 1/4W
Q1274		TRANSISTOR 2					R1287	1-249-431-11		15K	5%	1/4W
Q1275 Q1277	8-729-119-78	TRANSISTOR 25	SC2785-HI	Æ			R1288 R1289	1-249-431-11 1-249-429-11		15K 10K	5% 5%	1/4W 1/4W
Q1278 Q1279		TRANSISTOR 25					R1290 R1291	1-216-357-00 1-247-863-91	METAL OXIDE CARBON	4.7 22K	5% 5%	1W F 1/4W
Q1280		TRANSISTOR 2					R1292	1-249-429-11		10 <b>K</b>	5%	1/4W
		<resistor></resistor>					R1293 R1294	1-247-863-91 1-249-441-11	CARBON	22K 100K	5% 5%	1/4W 1/4W
R1204	1-247-891-00		330K	E CT	1 /4557		R1295 R1296	1-247-863-91	CARBON	22K	5%	1/4W
R1205	1-247-891-00	CARBON	330K	5% 5%	1/4W 1/4W			1-249-415-11		680	5%	1/4W
R1207	1-202-933-61 1-247-891-00	CARBON	0.1 330K	10% 5%	1/4W		R1297 R1298	1-249-425-11 1-249-411-11	CARBON	4.7K 330	5% 5%	1/4W 1/4W
R1208	1-247-891-00		330K	5%	1/4W		R1299 R1358	1-249-429-11 1-249-429-11	CARBON	10K 10K	5% 5%	1/4W 1/4W
R1209 R1210	1-216-375-00 1-247-891-00	METAL OXIDE CARBON	3.3 330K	5% 5%	2W 1/4W	F	R1360	1-249-441-11	CARBON	100K	5%	1/4W
R1211 R1212	1-247-891-00 1-216-375-00	CARBON METAL OXIDE	330K 3.3	5% 5%	1/4W 2W		R1361 R1362	1-247-887-00 1-249-437-11		220K 47K	5% 5%	1/4W 1/4W
R1213	1-249-393-11		10	5%	1/4W		R1363 R1364	1-249-429-11 1-259-880-11	CARBON	10K 2,2M	5% 5%	1/4W 1/4W
R1215	1-249-393-11		10	5%	1/4W	- 1	R1365	1-249-441-11		100K	5%	1/4W
R1230 R1231	1-249-393-11 1-247-807-31		10 100	5% 5%	1/4W 1/4W		R1366	1-249-432-11	CARBON	18K	5%	1/4W
R1232 R1233	1-247-883-00 1-215-448-00		150K 13K	5% 1%	1/4W 1/4W		R1367 R1368	1-249-425-11 1-249-410-11		4.7K 270	5% 5%	1/4W 1/4W
R1234	1-249-417-11		1 <b>K</b>	5%	1/4W		R1369 R1370	1-249-441-11 1-249-429-11	CARBON	100K 10K	5% 5%	1/4W 1/4W
R1235 R1236	1-215-428-00 1-249-429-11	METAL	2K	1%	1/4W							
R1237	1-247-807-31	CARBON	10 <b>K</b> 100	5% 5%	1/4W 1/4W		R1371 R1372	1-249-429-11 1-247-807-31		10 <b>K</b> 100	5% 5%	1/4W 1/4W
R1238	1-249-429-11	CARBON	10 <b>K</b>	5%	1/4W		R1373 R1374	1-249-413-11 1-249-417-11		470 1K	5% 5%	1/4W 1/4W
R1239 R1240	1-249-421-11	CARBON METAL OXIDE	2.2K 220	5% 5%	1/4W 2W		R1375	1-249-417-11		1K	5%	1/4W
R1241	1-249-429-11	CARBON	10K	5%	1/4W		R1376	1-247-807-31		100	5%	1/4W
R1242 R1243	1-249-425-11 1-249-429-11		4.7K 10K	5% 5%	1/4W 1/4W		R1377 R1378	1-249-417-11 1-249-417-11	CARBON	1 <b>K</b> 1 <b>K</b>	5% 5%	1/4W 1/4W
R1244	1-249-425-11		4.7K	5%	1/4W		R1379 R1380	1-249-427-11 1-249-427-11		6.8K 6.8K	5% 5%	1/4W 1/4W
R1245 R1248	1-211-761-11 1-211-761-11		0.1 0.1	10% 10%	1/2W 1/2W		R1381	1-249-429-11		10K	5%	1/4W
R1250 R1252	1-249-437-11 1-249-429-11	CARBON	47K 10K	5% 5%	1/4W 1/4W	İ	R1382 R1383	1-249-429-11	CARBON	10 <b>K</b>	5%	1/4W
							K1303	1-249-429-11	CARBUN	10 <b>K</b>	5%	1/4W
R1254 R1255	1-249-437-11 1-249-437-11	CARBON	47K 47K	5% 5%	1/4W 1/4W				<transforme< td=""><td>ER&gt;</td><td></td><td></td></transforme<>	ER>		
R1256 R1257	1-249-437-11 1-247-887-00		47K 220K	5% 5%	1/4W 1/4W		T1202	å 1-429-289-11	TRANSFORME	R. CONVE	RTER (P	IT)
						1						40.40.4000000

The componants identified by shading and mark  $\triangle$  are critical for safety.

Replace only with part number specified.

Les composants identifies par une trame et une marque  $\Delta$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



ZG



-													
REF. NO.	PART NO.	DESCRIPTION		Ē	REMARI		REF. NO.	PART NO.	DESCRIPTION			REMAR	K
T1204	д 1-427-864-12	TRANSFORMER	R, CONVER	CTER (PI	RT)		******	******	******	******	*****	******	***
								* A-1390-489-A	ZG BOARD, C	OMPLETE	, k		
*****	*****	*******	*****	*****	*****	**							
	* A-1390-487-A	ZR BOARD, CO							<capacitor></capacitor>				
	4-382-854-11	SCREW (M3X10	), P, SW (+	)			C1433	1-102-973-00	CERAMIC	100PF	5%	50V	
		<capacitor></capacitor>							<connector:< td=""><td></td><td></td><td></td><td></td></connector:<>				
C1403	1-102-978-00		220PF	5%	50V		CN1441	* 1-580-689-11	PIN, CONNECT		)ARD)	4P	
C1404 C1405	1-107-638-11 1-104-665-11		33MF 100MF	20% 20%	160V 25V		CN1442	*1-564-507-11	PLUG, CONNEC	CTOR 4P	,		
C1406 C1407	1-107-370-11 1-104-665-11		0.1MF 100MF	10% 20%	200V 25V				PLUG, CONNEC				
C1408	1-107-362-11		0.0047MF		200V				<resistor></resistor>				
C1409 C1410	1-107-667-11 1-107-362-11	FILM	2.2MF 0.0047MF		160V 200V		R1431	1-249-414-11	CARBON	560	5%	1/4W	
C1411 C1412	1-137-364-11 1-137-364-11	FILM FILM	0.001MF 0.001MF	5% 5%	50V 50V		R1432 R1435	1-249-414-11 1-216-475-11	CARBON METAL OXIDE	560 120	5% 5%	1/4W 3W	]
C1413	1-161-830-00		0.0047MF		500V		R1436 R1437	1-216-475-11 1-249-417-11	METAL OXIDE CARBON	120 1 <b>K</b>	5% 5%	3W 1/4W	v I
C1414 C1415	1-104-661-91 1-102-947-00	CERAMIC	10PF	20% 0.5PF	16V 50V								
C1416	1-102-973-00	CERAMIC	100PF	5%	50V		******	*****	******	*****	*****	******	**>
		<connector></connector>	•					* A-1390-491-A	ZB BOARD, C	OMPLETE			
CN1411	*1-580-689-11	PIN, CONNECTO PLUG, CONNEC	OR (PC BO	ARD) 4F	•				*****	*****	K		
CN1413	*1-564-506-11	PLUG, CONNEC PLUG, CONNEC	CTOR 3P						CONNECTOR				
		PLUG, CONNEC					CNIATI	*1 600 600 11	<connector:< td=""><td></td><td>ADD)</td><td>40</td><td></td></connector:<>		ADD)	40	
CN1416	1-695-915-11	TAB (CONTACT	r)				CN1472	*1-564-507-11	PIN, CONNECTOR PLUG, CONNECTOR	CTOR 4P	JAKU)	4P	
		<diode></diode>					CN14/3	1-304-300-11	FLOO, CONNEC	JOK 3F			
D1401	8-719-921-86	DIODE MTZJ-13	1						<resistor></resistor>				
D1402		DIODE MTZJ-13					R1461 R1462	1-249-414-11 1-249-414-11		560 560	5% 5%	1/4W 1/4W	
		<transistor:< td=""><td>&gt;</td><td></td><td></td><td></td><td>R1465 R1466</td><td>1-216-475-11</td><td>METAL OXIDE METAL OXIDE</td><td>120</td><td>5% 5%</td><td>3W 3W</td><td>]</td></transistor:<>	>				R1465 R1466	1-216-475-11	METAL OXIDE METAL OXIDE	120	5% 5%	3W 3W	]
Q1401		TRANSISTOR 2											Ī
Q1402 Q1403	8-729-017-05 8-729-140-96	TRANSISTOR 2 TRANSISTOR 2	SA1837 SD774-34				******	*****	******	*********	*****	******	**
									MISCELLANEO				
D 1 40 1	1 040 414 11	<resistor></resistor>	# CO	# cu	4 /4***				RESISTOR ASS			GE)	
R1401 R1402 R1405	1-249-414-11	CARBON	560 560	5% 5%	1/4W 1/4W			<b>∆ 1-452-790-11</b>		TENNA (A	(S-2)		23
R1405 R1406 R1407		METAL OXIDE		5% 5%	1/4W 3W	F		1-452-790-21 1-504-785-11	SPEAKER (10C)	M) (KP-61V	V35)		N
R1407	1-249-400-11 1-249-384-11		39	5%	1/4W				SPEAKER (13C)			***	
R1409 R1410	1-249-384-11	CARBON	1.8 1.8	5% 5%	1/4W 1/4W	F		1-556-945-21		M) (KV-46	V 35/53	V35)	
R1411 R1411 R1412	1-247-734-11	CARBON	39 1K	5% 5%	1/2W 1/4W	F		*1-557-056-41 <b>&amp; 1-769-837-11</b>	CORD, POWER	(WITH NO			
R1412	1-249-414-11		560	5%	1/4W			K 1 000 011 04	TEAD ACCULAN	er e		(7.0A/1	45.
R1414 R1414 R1415	1-249-432-11 1-249-432-11 1-249-414-11	CARBON	18K 18K 560	5% 5% 5%	1/4W 1/4W 1/4W	F		₫ 8-451-463-11	LEAD ASSY, H	OKE Y829			
R1416 R1417	1-216-451-11	METAL OXIDE METAL OXIDE	120	5% 5%	2W 3W	F F		<b>∆ 8-598-955-10</b>	BLOCK ASSY, PICTURE TUBE	HIGH-VOL	TAGE		
R1417	1-249-377-11		0.47	5%	3 W	r F	1		PICTURE TUBE				2000 1920
R1419 R1420	1-247-815-91		220	5% 5%	1/4W 3W	F			PICTURE TUBE		B)	3V35/61	V2
R1421	1-249-417-11		1K	5%	1/4W	•			PICTURE TUBE		R) (KP		
									TOTORE TOOL	. J. mires (		3V35/61	<b>V</b> 3

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	8-741-797-01	FILTER, DIGITAL COM SBX179	97-01	İ	* 4-048-087-01	CUSHION (UPPER) (ASS)	Y) (KP-53V35)
		, , , , , , , , , , , , , , , , , , , ,				CUSHION (LOWER) (ASS	
				İ	4-048-634-01		
******	******	*********	*****		4-048-790-01	GLASS (53), DOOR (KP-4	6V35/53V35)
		ES AND PACKING MATERIALS				GLASS (61), DOOR (KP-6	
	******	********		İ		BOARD, BOTTOM (KP-5:	3V35)
				1		TRAY (KP-53V35)	
		BAG, POLYETHYLENE				INDIVIDUAL CARTON (	KP-53V35)
		MANUAL, INSTRUCTION			* 4-049-193-01	BAG, POLYETHYLENE	
		MANUAL, INSTRUCTION (Cana	adian model)		+ 4 040 077 01	CHEET DROTECTION (V	TD 465105)
	4-036-901-01	BOARD, TOP (KP-46V35)				SHEET, PROTECTION (K CUSHION (FRONT) (ASS	
	* 4-03/-0/4-01	BOARD, 10P (KP-46V33)				BLOCK, FOAM (KP-61V3	
	4-038-384-01	CATCHER, MAGNET				CUSHION (UPPER) (ASS	
	4-038-385-01			1		BAG. PROTECTION (KP-	
		CUSHION, GLASS			. 0.5 552 0.	2.10,11101201101. (12	0.,00,
		BAG, PROTECTION (KP-46V35)	/53V35)		7-682-576-04	SCREW +B 5X12	
		SHEET, PROTECTION (KP-53V)			7-684-025-04	N 5, TYPE 2	
		,				SCREW +BVTP 4X12 TY	
		INDIVIDUAL CARTON (KP-61)	/35)			DOOR ASSY, RACK (KP-	
		TRAY (KP-61V35)			X-4033-667-1	DOOR (L) ASSY, RACK (	(KP-46V35/53V35)
		PLATE, TOP (KP-61V35)					
		BOARD, BOTTOM (KP-61V35)			X-4033-668-1	DOOR (R) ASSY, RACK (	(KP-46V35/53V35)
	* 4-047-557-01	CUSHION (UPPER) (ASSY) (KP	-61 V35)				
		CUSHION (LOWER) (ASSY) (K				REMOTE COMMANDER	
		CUSHION (LEFT UPPER) (KP-6		i		******	
		CUSHION (RIGHT UPPER) (KP-					
		CUSHION (LEFT LOWER) (KP-		l		REMOTE COMMANDER	
	* 4-047-562-01	CUSHION (RIGHT LOWER) (KI	?-61V35)		4-978-977-01	POCKET, COVER (FOR F	(M-Y137)
	* 4-047-603-01	CUSHION (UPPER) (ASSY) (KP	-46V35)				
	* 4-047-604-01	CUSHION (LOWER) (ASSY) (KI					
		TRAY (KP-46V35)					
		BOARD, BOTTOM (KP-46V35)					
	* 4-047-608-01	INDIVIDUAL CARTON (KP-46)	V35)				
	* 4-047-774-01	PLATE, TOP (KP-53V35)					